Canterbury
District Health Board
Te Poari Hauora ō Waitaha

West Coast
District Health Board
Te Poari Hauora a Rohe o Tai Poutini

CORPORATE OFFICE

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31 August 2018

[redacted]

RE Official information request CDHB 9881 and WCDHB 9161

We refer to your email dated 21 June 2018 requesting the following information under the Official Information Act from Canterbury DHB and West Coast DHB.

1. **A list of all buildings/facilities that have been identified as needing remediation or building works. Please include: what the building/facility is used for, the reason changes are needed (i.e leaky building, earthquake prone, more capacity needed), the level of urgency/concern and/or a target or expected date for completion, any approximate costings.**

Canterbury DHB has a property portfolio of about 150 buildings. West Coast DHB also has a significant number of buildings. The majority of DHB buildings were constructed before the year 2000. As a general note, all buildings (especially older building stocks) require ongoing maintenance. Canterbury DHB and West Coast DHB each have maintenance programmes that are subject to ongoing review and prioritisation.

Earthquake

The Canterbury earthquakes generally affected all of Canterbury DHB's buildings/infrastructure. Canterbury DHB's earthquake prone buildings (being those less than 34% New Buildings Standard ("NBS")) are listed on the Earthquake Prone Building Register available at www.epbr.building.govt.nz; That list does not capture all Canterbury DHB buildings requiring earthquake remediation (those buildings over 34% NBS). Canterbury DHB has an earthquake remediation programme of works that is subject to ongoing review and prioritisation.

The timeframes for remediation of earthquake prone buildings is prescribed by statute as 15 years or 7.5 years for "Priority" buildings. Priority buildings are those that have a post disaster response function, which will generally capture hospital buildings. Notwithstanding these overarching statutory timeframes, earthquake remediation is prioritised by Canterbury DHB as required to address any life safety/other health and safety risk. All earthquake remediation required (whether for earthquake-prone buildings or otherwise) are put through a prioritisation framework to determine prioritisation for remediation

The earthquake damage incurred by Canterbury DHB exceeded CDHB's cap on insurance. Utilisation of the capital available in the earthquake programme of works is continually being reviewed and prioritised by Canterbury DHB.

Leaky Buildings, Asbestos and Sewage

Canterbury DHB and West Coast DHB are not aware of any issues in design or construction that would render any buildings "leaky buildings" as that term is commonly defined. The DHB's do, however, have a number of old buildings that have issues in the nature of maintenance that are addressed as part of a maintenance programme. We refer you to the following published OIA responses advising the extent of weather-tightness, asbestos and sewage related issues at the DHBs:

- CDHB 9830 / WCDHB 9114;
- CDHB 9834 / WCDHB 9117; and
- CDHB 9843 / WCDHB 9126,

These are available to view on the Canterbury DHB and WCDHB websites at the following links:

http://www.cdhb.health.nz/About-CDHB/oia/responses/Pages/default.aspx
http://www.westcoastdhb.org.nz/about_us/OIA/responses-2018.asp

2. **A list of all new buildings/facilities planned by the DHB, or identified as necessary. Please include: what the building/facility would be used for, any expected or target date for completion, approximate costings, and whether the project has been approved or budgeted for.**

The following building works are currently underway or are identified as necessary:

Canterbury DHB

Building	What	Target Completion	Approved Budget*
Outpatients**	New build	September 2018	$72m
Acute Services Building**	New build	June 2019	$463m
Energy Centre**	New build	TBC	TBC
Specialist Mental Health relocation to Hillmorton**	New build and refurbishment	TBC	TBC
Akaroa IFHC	New build	May 2019	$5.9m
Assessment, Treatment & Rehabilitation, Hillmorton	New build	2019	$5.89m
Burwood Mini Health Precinct	New build and refurbishment	2019	TBC
Burwood Spinal Unit	Ensuite rooms extension	2019	$7.43m
Rangiora Health Hub	New Build, relocation of existing Hagley Outpatients building	Completed 2018 (2019 for the relocation of Hagley Outpatients)	$9.9m (for all three stages)
Christchurch Home Dialysis Centre	Relocation to refurbished leased premises	2018	$2.28m

West Coast DHB

Building	What	Target Completion	Approved Budget*
Grey Base Hospital**	New build	TBC	$77.8m
Cowper/High Street Administration Building	New build	TBC	TBC

*Where approved budgets have been withheld from the above table, this is because they are not yet determined or approved or are withheld pursuant to section 9(2)(b)(ii) of the Act on that basis that such release could prejudice the commercial position of the DHB (for example, where the Canterbury DHB is yet to undertake a procurement process to engage contractors on the project).

**The Ministry of Health are responsible for these projects. The Ministry are yet to formally advise the DHBs the amended completion dates for these Ministry building projects.

A Ministry led Christchurch Hospital master planning process in ongoing. In addition, the Ministry is responsible for delivering a permanent car parking solution for completion in 2020. There is also a strategic business case being progressed for a replacement labs facility.

3. **Since January 1 2016 copies of any reports, documents, correspondence relating to a facilities stocktake, including since September 2017 correspondence or advice to the Ministry or Minister about facilities that need work, or new facilities that are needed.**

We provide the following reports:

- **Appendix 1** Monthly Facilities Reports for the last 6 months (noting there was no report for March, and the reports include the Quarterly Facilities Updates);
- **Appendix 2** Hillmorton Hospital Draft condition assessment report; and
- **Appendix 3** Seismic Assessment Report as at June 2018.

We have withheld the budgets in the Quarterly Facilities Update under section 9(2)(b)(ii) of the Act on that basis that such release could prejudice the commercial position of the DHB (for example, where the Canterbury DHB is yet to undertake a procurement process to engage contractors on the project).

The Monthly/Quarterly Facilities Reports and the six monthly Seismic Reports are provided to the Ministry of Health as part of regular reporting (all Board papers go to the Ministry).

Beyond the above reports that were readily available to provide, your broad request requires substantial collation and research and is therefore declined under section 18(f) of the Act.

I trust that this satisfies your interest in this matter.

If you disagree with our decision to withhold information you may, under section 28(3) of the Official Information Act, seek an investigation and review of our decision from the Ombudsman.

Please note that this response, or an edited version of this response, may be published on the Canterbury DHB and West Coast DHB website.

Yours sincerely

Carolyn Gullery
Executive Director
Planning, Funding & Decision Support

QUARTERLY FACILITIES/EARTHQUAKE POW UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members Facilities Committee**

SOURCE: **Site Redevelopment**

DATE: **30 January 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper provides a detailed update on the Earthquake/Facilities Programme of Works (*POW*). This paper is provided on a quarterly basis, and also goes to the Hospital Redevelopment Partnership Group (*HRPG*). In addition, this paper is also provided to the Canterbury DHB Board and Quality, Finance, Audit and Risk Committee for information.

2. RECOMMENDATION

That the Committee:

i. notes:
- the quarterly Programme of Works (*POW*) report as at January 2018, as outlined in Appendix 1, and that this report has four sections (as requested by the Committee):
  - Yet to be Approved projects;
  - Approved Work-in-Progress projects;
  - Completed projects;
  - Excluded/Deferred projects;
- the Facilities update summary by campus, as provided in Appendix2;
- the detailed project status reports for major projects that are underway and CDHB Safety Report as provided in Appendix 3;

ii. notes the major changes are:
- Item "R1a – Energy Centre" – concept design was completed by MoH project in Dec 2017. CDHB supported proceeding to preliminary design but highlighted a number of issues to be resolved via the preliminary design phase. The estimated cost based on the concept design is $40.435M;
- Item "R1b-Tunnel Work" – there has been a delay resulting in the scheduled steam changeover being deferred to January 2018 (instead of Dec 2017);
- Item "R2 – ChCh Hospital Campus Master Plan" – completion of the Indicative Business Case is planned for March 2018;
- Item "R3 – Mental Health Relocation from PMH" – completion of Detailed Business Case is planned for July 2018;
- Item "C24a – Diabetes Building: Relocation of Home Dialysis Unit to 16-18 St Asaph/66 Stewart Street" is a new item – the requirement for $2.286M has been submitted to the 30 Jan 2018 Facilities Committee for recommendation to the 15 Feb 2018 Board for approval. After which the paper will be submitted to the March 2018 HRPG for noting. The funding has been reprioritised from Item "C71 Critical Structural Weakness" indicative allocation;

- Item "C71 - Critical Structural Weakness" – indicative budget reduced to fund the relocation of Home Dialysis Unit from the Diabetes building as outlined above;

iii. notes that the indicative funding gap within the PoW budget is about $22M (no change from the last quarterly report); and

iv. notes the indicative cashflow plan for Site Redevelopment managed projects; as outlined in Appendix 4.

3. SUMMARY

	Re-Prioritised Budget (Nov 2017)	Re-Prioritised Budget (Jan 2018)
Subtotal for Priority Ringfenced Projects	[redacted]	
Christchurch Campus - Subtotal		
Burwood Campus - Subtotal		
Hillmorton Campus - Subtotal		
TPMH Campus - Subtotal		
Ashburton Campus - Subtotal		
Other Sites Campus - Subtotal		
Total Requirements		
Indicative Funding Shortfall		
POW Total Budget		

4. APPENDICES

Appendix 1:	Quarterly Programme of Works Summary
Appendix 2:	Facilities Update Summary by Campus
Appendix 3:	Detailed Project Status Reports & Safety Report
Appendix 4:	Site Redevelopment Managed Projects Cashflow

Report prepared by: Brad Cabell, Programme Director - Construction & Property
Beng-Cheng Chan – Corporate Support

Report approved for release: Justine White, GM Finance & Corporate Services

FACILITIES UPDATE SUMMARY BY CAMPUS

Canterbury District Health Board
Te Poari Hauora ō Waitaha

SUMMARY – FACILITIES UPDATE

Approved projects are progressing as planned with the main updates since the previous report as outlined below.

General EQ repairs within Christchurch campus:

- A business case to develop a design solution for EQ prone Parkside Panels has been approved. Design for the panels (adjacent to the new link corridor) has been provided to the ASB link contractor for pricing after which a business case for construction will be forwarded to the Board. This work has some urgency as some panels must be removed prior to opening of the ASB Western Link Bridge. Other urgent panel works will be programmed after this tranche of work.
- Clinical Service Block roof strengthening above Nuclear Medicine: The business case has been approved and a Project Manager has been identified. Current delivery dates for the equipment are forecast for the end of May 2018. The programme for construction is reliant on this date. Design consultants have been engaged. Detailed design to start shortly, followed by construction.
- Clinical Service Block: Ground floor fire protection to Bone Shop side of corridor work complete, tagging and As Built/Producer Statements are in final review. We are currently awaiting responses to final questions raised by the fire engineer after which we will close out this piece of work.
- Design and planning underway for Labs Stair 3 (south-west corner). Business case for remaining work to stair 3, stair 4 and panels has been approved. Exemption from Building Consent has been granted and work is underway.
- Concept Design for strengthening of Parkside link to CSB is complete and has been priced by the Quantity Surveyor. A decision will be required on whether to proceed with these works.

Christchurch Women's Hospital

- Stair 2: Awaiting review from fire engineer to enable planning.
- Level 4: Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels.
- Level 5: Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time.
- Level 3: All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.
- Inspection of the flooring structure has identified potential damage to the floor ribs. Building Consent signed off for inspection of the ribs. Programme to be confirmed. This will require a detail assessment to determine extent of damage and subsequent repair strategies.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering.**
  - Database designs complete and in use by Site Redevelopment on current passive work.
  - Test rig complete and installer testing has commenced. RFP for materials is currently active on GETs and due to close mid Feb.

- Currently working with ISG/Developers for options to transfer database to a cloud base system complete with E form and onsite inspection capability via IPad/ Android phone apps.
- Continue to identify more non-compliant areas as other projects open walls/ ceilings.

- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*).
  - Service Tunnel: Structurally complete. Services complete and await commissioning and 3rd party sign off.
  - Energy Centre: Concept report including cost plan received by CDHB and commented. Preliminary design to commence January.
- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until boiler requirements have been resolved for the new energy centre.
- **Parkside renovation project to accommodate clinical services, post ASB (managed by MoH):** Health planners appointed and planning underway. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. The SRDU team are having regular meetings with the MoH project managers (Projex) to assist in their information gaps.
- **New Outpatient project (managed by MoH).** Façade 70% complete. Internal services and architectural fit out underway. MoH/Leighs still to agree on construction programme and dates of handover to CDHB.
- **Avon Generator Switch Gear and Transformer Relocation**. Design work underway. Due to the small size and engineering component this is now being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro ARP works Oxford Terrace commenced. Otakaro have confirmed that they cannot complete all their work around OPD by opening date of OPD. Antigua St (between Oxford Terrace and Tuam St) works underway. No programme dates for 'Oxford Gap' (Riccarton Ave to Antigua St). No confirmation on bus stop land/afternoon staff cark park land swap.

Burwood Hospital Campus

- **Burwood New Build**: Defects are being addressed as they come to hand.
- **Burwood Admin old main entrance block:** Requirements for a minimally invasive ground improvement is currently being investigated. Options for new build for Mini Health precinct also being developed, along with redevelopment of top floor of Old Surgical Block. Feasibility study complete and report currently being prepared for consideration by Facilities Committee.
- **Drainage repairs**: Work complete. In final stages of As Built review.
- **Spinal Unit:** Design and user group process continues. Detailed design due for completion by end of February with tenders to go to the market in late March post scheduling work being carried out.
- **Burwood Birthing/Brain Injury Demolition**: Methodology to be agreed. External Project managers commissioned to undertake work. Programme from commencement of demolition could take up to 12 months to complete due to the complex nature of asbestos removal and the proximity of other clinical facilities. Existing switch board servicing other parts of the campus will need to be relocated and or re-routed to allow demolition to commence. Price for switchboard works received from market and orders are about to be placed. Consultant agreements complete and with legal for sign off with design work planned to commence in early February.

- **2nd MRI Installation:** Design work and planning continues. MRI scanner temporarily relocated from Merivale to storage at Print Place. Faraday cage installation is being repriced by another provider. A new MRI has now been sourced with the original Merivale MRI traded in as part of the procurement process.
- **Decision making frame work**: Proofing to commence shortly.

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building**. On hold at present. Currently undertaking a structural review to determine options for repairs concurrently with full or partial occupation.
- **Cotter Trust** on-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Review of all Forensic services including PSAID, AT&R, Roko being completed, including refurbishment verses rebuild cost and logistic process. Awaiting results of clinical review. Concept design for AT&R built at Design Lab has been reviewed by staff. All Design Lab work complete. Designs returned to Architect and Project Manager to work with Architect to complete concept design based on CDHB modifications made at the Design Lab. Program of works issued to Clinical team. EOI/ RFP for full design currently in development stage and due to be issued mid to late Feb 2018.
- **Decision making frame work**: Proofing to commence shortly.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** Options still being investigated by the service to relocate the remaining community teams from TPMH.
- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in Sept 2017. The next step is the development of Detailed Business Case which is planned for July 2018 for submission.

Ashburton Hospital & Rural Campus

- Stage 1 and 2 works are both complete. Final claims have been agreed with the contractor. Final defects resolution and retention release expected by June 2018.
- **Tuarangi Plant Room**: Upgrade of access and egress systems. Information with M&E for confirmation, then to consultants for design.
- **New Boiler and Boiler House**: Project process to commence shortly.

Other Sites/Work

- **Decision Making Frame Work:** This work is now being led by Planning and Funding. Workshops have been scheduled to occur Feb to April 2018 for both the Burwood and Hillmorton campuses. Resilient Organisation Ltd have been contracted by Planning and Funding to assist with this process. SRDU will continue to be heavily involved to ensure a streamlined process is achieved.
- **Akaroa Health Hub**. Both Resource Consent and Building Consent have been received. Main Contractor Tenders have been received and are currently being assessed.
- **Kaikoura Integrated Family Health Centre**: Code compliance received. Scoping of cosmetic damage due to November's earthquake is complete. Estimates provided to Corporate Finance. Final design works for remedials to adjoining neighbours drives have now started. These had been stalled due to EQ issues in the area.

- **Rangiora Health Hub**: Developed design underway. RPF for contractor to go to the market in November. Current MoH provided dates to allow removal of Hagley Outpatient building to Rangiora is 24 May 2018.
- **Former Christchurch Women's Site**: Order issued for bi annual grass cutting and weed treatment following requests from neighbouring owners.
- **Home Dialysis**. Business case to be presented to 30 January 2018 Facilities Committee meeting, for recommendation to 15 February 2018 Board for approval.
- **SRDU**. Project Management Office manuals re-write and systems overview. Approximately 45% complete.
- **Seismic Monitoring**: Business Case approved. RFP documentation being developed.
- **Laundry Building**: Currently under review for options to fix based on a change of use possibly for CDHB store/warehouse and other facilities.

Project/Programme Key Issues

- The lack of a detailed Master Plan for the Hillmorton campus is affecting our ability to provide a comprehensive EQ decision making assessment. As a result, we will be submitting a proposal for the CDHB to undertake this piece of work. We will continue with the framework assessment, but it will need a more rigorous assessment for individual buildings given the lack of detail around service provision, models of care and synergies with campus facilities going forward.
- Additional peer reviews of Parkside and Riverside structural assessments is being undertaken by the MoH. This continues to push out the already protracted master planning process. This is also having an effect on the sizing and future proofing of energy supply from the proposed boiler house.
- Delays to the programme of works continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. The urgent works undertaken to facilitate the MoH run link corridor works has further affected this. Restricted access has been given to one area.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.
- Passive fire issues are now being raised in the labs building. Initial scope completed and in process of completing a basic design work review for the area prior to progressing to full review/works.
- Uncertainty of delivery of MoH projects is severely affecting our ability to programme projects and allocate resources efficiently. Rangiora is one example in this space. A firm date from the MoH is not able to be provided currently.
- Proposed ASB Western Link – a number of constraints and issues have been identified by CDHB and these are being worked through with assistance from SRU. The requirements of additional decant space, the responsibility for undertaking the work and payment of costs is still to be addressed by the MoH as they are an ASB related project work face. Additional passive fire noncompliance has been found in areas of the proposed new links during opening works. Site Redevelopment have provided support and design details to mitigate risks to service provision for the theatres. Due to the limited timeframe certain noncompliance areas will be temporary filled, photographed and recorded for future repair.

- Burwood 2nd MRI. Delays to the procurement of the faraday cage installation contractor and the change of procurement strategies continue to push this project out. This is currently being managed by procurement. The use of an alternative contractor will create additional budget pressure due to existing agreements.

FACILITIES UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members**
Facilities Committee

SOURCE: **Site Redevelopment/Finance**

DATE: **27 February 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper is a standard agenda item to the Facilities Committee providing an overview of progress with approved projects. A more detailed paper is provided to the Committee quarterly, which also goes to the Canterbury DHB Board and the Hospital Redevelopment Partnership Group (*HRPG*) on a quarterly basis.

2. RECOMMENDATION

That the Committee:

i. notes the Facilities Update report.

3. SUMMARY – FACILITIES UPDATE

Approved projects are progressing as planned with the main updates since the previous report as outlined below

General EQ Repairs within Christchurch Campus

- Parkside Panels: Detailed planning is continuing for disconnecting the Chemo Day Ward for Parkside. This may require partial decanting of the ward. Still awaiting pricing from ASB Link contractor for this work. Design work for replacing confined corner panels is proceeding well now that a number of technical fire and durability issues have been resolved.
- Clinical Service Block roof strengthening above Nuclear Medicine: The business case has been approved. Current delivery dates for the equipment are forecast for the end of May 2018. The programme for construction is reliant on this date. Design consultants have been engaged. Detailed design has started and programme will be updated shortly.
- Design and planning underway for Labs Stair 3 (south-west corner). Business case for remaining work to Stair 3 and panels has been approved. Exemption from Building Consent has been granted and work is underway. Lab Stair 4 initial/scoping work to begin. Some work to the plant room will need to be undertaken before the completion of Lab Stair 3 and when the Eye Department are still in the Portacoms.
- Concept Design for strengthening of Parkside link to CSB is complete and has been priced by the Quantity Surveyor. A decision will be required on whether to proceed with these works.

Christchurch Women's Hospital

- Stair 2: Awaiting review from fire engineer to enable planning as part of the overall Women's Risk analysis.

- Level 4: Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels.
- Level 5: Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time.
- Level 3: All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.
- Inspection of the flooring structure (Ribs) has been completed and no structural remediation is required.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering**
  a. Database designs complete and in use by Site Redevelopment on current passive work.
  b. Test rig complete and installer testing has commenced. RFP for materials is currently active on GETs and due to close mid Feb.
  c. Currently working with ISG/Developers for options to transfer database to a cloud base system complete with E form and onsite inspection capability via IPad/ Android phone apps. Draft Policy and Guidelines issued to M&E and Senior Management. SRU continue to upgrade on project to project basis until comment/ advice received.
  d. Continue to identify more non-compliant areas as other projects open walls/ ceilings.
- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*).
  a. Service Tunnel: Services being commissioned. Expect steam from coal boilers 16 Feb.
  b. Energy Centre: Concept report including cost plan received by CDHB and commented. Awaiting preliminary start.
- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until boiler requirements have been resolved for the new energy centre.
- **Parkside renovation project to accommodate clinical services, post ASB (managed by MoH):** Health planners appointed and planning underway. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. The SRDU team are having regular meetings with the MoH project managers (Projex) to assist in their information gaps.
- **Back up VIE tank:** Work on developing a target strength for the VIE enclosure is underway. Balancing operational and post-disaster requirements against cost and build ability is a key focus for this work.
- **New Outpatient project (managed by MoH**): Façade 80% complete. Architectural/ services fit out on all floors well underway. Rev 5.0 programme issued to MoH/JSL with SP1 date 29 June. SP2 4 August.
- **Avon Generator Switch Gear and Transformer Relocation**. Design work underway. Due to the small size and engineering component this is now being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro have issued revised contractor programme. Oxford Terrace complete Sep 2018, Antigua St (OPD/HREF) Apr 2018, Oxford Gap Apr 2018 to Sep 2018. Tuam St/Bus Super Stops has no dates. Land swap discussion still with LINZ.
- **Parkside Canopies:** Temporary repairs to plastic wrap have been made. Planning underway to replace the wrap at the main entry.

Burwood Hospital Campus

- **Burwood New Build**: Defects are being addressed as they come to hand.
- **Burwood Admin old main entrance block:** Feasibility study complete and work to commence on repurposing building to accommodate community teams for TPMH. Concept work also to commence on purpose built structure for the Mini Health Precinct.
- **Drainage repairs**: Work complete. In final stages of As Built review.
- **Spinal Unit:** Design and user group process continues. ROI for main contractors on GETS. Closes 14 February.
- **Burwood Birthing/Brain Injury Demolition**: Methodology to be agreed. External project managers commissioned to undertake work. Programme from commencement of demolition could take up to 12 months to complete due to the complex nature of asbestos removal and the proximity of other clinical facilities. Existing switch board servicing other parts of the campus will need to be relocated and or re-routed to allow demolition to commence. Price for switchboard works received from market and orders are about to be placed. Consultant agreements complete and with legal for sign off with design work planned to commence in early February. ROI on GETS for main contractor to demolish building. The work will be carried out under separable portions.
- **Burwood Tunnel Repairs:** Work has been scoped and priced. Expected start is March 2018.
- **2nd MRI Installation:** Design work and planning continues. MRI scanner temporarily relocated from Merivale to storage at Print Place. Faraday cage installation is being repriced by another provider. A new MRI has now been sourced with the original Merivale MRI traded in as part of the procurement process. Scope of works being finalised and costed with Siemens.
- **Decision making frame work**: Workshops to be run by Planning and Funding are scheduled for 5 March and 11 April.

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building**. On hold at present. Currently undertaking a structural review to determine options for repairs concurrently with full or partial occupation.
- **Cotter Trust** on-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Review of all Forensic services including PSAID, AT&R, and Roko being completed, including refurbishment verses rebuild cost and logistic process. Awaiting results of clinical review. Concept design for AT&R built at Design Lab has been reviewed by staff. All Design Lab work complete. Designs returned from Architect. Currently with Clinical team for clinical leaders group sign off prior to business case being prepared. RFP for full design currently in development stage and due to be issued mid to late Feb 2018.
- **Decision making frame work**: Workshops, to be run by Planning and Funding, are scheduled for 22 Feb and 9 April.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** The feasibility study is now complete and work is to commence shortly on repurposing the old Burwood Administration building to accommodate community teams

- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in Sept 2017. The next step is the development of Detailed Business Case which is planned for July 2018 for submission.

Ashburton Hospital & Rural Campus

- Stage 1 and 2 works are both complete. Final claims have been agreed with the contractor. Final defects resolution and retention release expected by June 2018.
- **Tuarangi Plant Room**: Upgrade of access and egress systems. Options have been provided by the Architect and Safety consultant. Next meeting is on site at Tuarangi to confirm which option should go through to concept design for pricing and signoff.
- **New Boiler and Boiler House**: Project process commenced. This is being managed by M&E.

Other Sites/Work

- **Decision Making Frame Work:** This work is now being led by Planning and Funding. Workshops have been scheduled to occur Feb to April 2018 for both the Burwood and Hillmorton campuses. Resilient Organisation Ltd have been contracted by Planning and Funding to assist with this process. SRDU will continue to be heavily involved to ensure a streamlined process is achieved.
- **Akaroa Health Hub**. Both Resource Consent and Building Consent have been received. Evaluation of main contractor tenders is complete. Contract award and start of site works is expected shortly.
- **Kaikoura Integrated Family Health Centre**: Code compliance received. Scoping of cosmetic damage due to November's earthquake is complete. Estimates provided to Corporate Finance. Final design works for remedial to adjoining neighbours drives have now started. These had been stalled due to EQ issues in the area.
- **Rangiora Health Hub**: Design complete. Building consent application lodged with Waimakariri District Council mid-January. Main contractor tender documents signed off by Corporate. RFP will be placed on GETS 19 February. Current MoH date for the Hagley Outpatients building to be available is 29 June.
- **Former Christchurch Women's Site**: Order issued for bi annual grass cutting and weed treatment following requests from neighbouring owners.
- **Home Dialysis**. Business case has been presented to 30 January 2018 Facilities Committee meeting, recommended to 15 February 2018 Board for approval. Approval of consultants to proceed.
- **SRDU**. Project Management Office manuals re-write and systems overview. Approximately 55% complete. Aligning with P3M3 process and documentation where appropriate.
- **Seismic Monitoring**: Business Case approved. RFP documentation being developed.
- **Laundry Building**: Currently under review for options to fix based on a change of use possibly for CDHB store/warehouse and other facilities. Feasibility study underway.
- **New Laundry:** SRU continuing to assist CLS with procurement of construction advice for the new design/build/lease laundry facility.
- **HREF:** SRU continues to be involved in providing construction and contract administration/interpretation advice to the HREF project.
- **Annual Damage reviews:** Planning is underway for the 2018 repeat damage assessment of the DHB's building stock.

Reprioritisation Framework

- This process has now commenced with the first training session taking place on Friday 16 February.
- The first round of workshops will start the week following.
- The Hillmorton Workshop #1 will be held on 22 February, with the first Burwood workshop being held on 5 March.
- The Engineers have been allocated approximately 5-6 weeks to pull together their information before the second round of workshops are held, with Hillmorton on 9 April and Burwood 11 April.
- The Burwood workshop dates were changed due to a clash with another large meeting that includes the majority of our required attendees. It is unfortunate that both second workshops are taking place on the same week, however, this was done to prevent the delay becoming too great.

Project/Programme Key Issues

- The recent notification of Fletcher Construction closing down their building and interiors division will have effects on current work programmes and pricing. SRDU are currently working through outstanding work and projects to identify the risks and issues for delivery of these projects.
- The lack of a detailed Master Plan for the Hillmorton campus is still affecting our ability to provide a comprehensive EQ decision making assessment. This requirement has been forwarded onto Planning and Funding for review and action.
- Additional peer reviews of Parkside and Riverside structural assessments, being undertaken by the MoH, are now complete. Clarity on the direction of the Master Planning process is required to plan the next stage of the POW. This is also having an effect on the sizing and future proofing of energy supply from the proposed boiler house.
- Delays to the POW continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Identifying a new cladding system for Parkside has been delayed by uncertainty around the compliance status and acceptability of a number of products and systems. Understanding of the Christchurch City Council's position in relation to passive fire, the tests that are to be applied and which elements are to be subjected to assessment can best be described as emerging. Systems and products that have been used in the past or in projects already under construction have not been deemed compliant for this project, and this has made it difficult for the CDHB's designers to provide advice with any degree of confidence. After several months of research and assessment, the CDHB's fire engineers, façade engineers, and architect have identified a system that the Council has indicated will be accepted as compliant.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. The urgent works undertaken to facilitate the MoH run link corridor works has further affected this. Restricted access has been given to one area.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up, but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.
- Passive fire issues are now being raised in the Labs building. Work completed and in final review and potential passive fire issues around comm floor 80 and use of all proof collars at outpatients, ASB and Burwood are currently under review.

- Uncertainty of delivery of MoH projects is severely affecting our ability to programme projects and allocate resources efficiently. Rangiora is one such example. A firm date from the MoH is still not able to be provided with any level of confidence.
- Proposed ASB Western Link – a number of constraints and issues have been identified by CDHB and these are being worked through with assistance from SRU. The requirements of additional decant space, the responsibility for undertaking the work and payment of costs is still to be addressed by the MoH as they are an ASB related project work face. Additional passive fire noncompliance has been found in areas of the proposed new links during opening works. Site Redevelopment have provided support and design details to mitigate risks to service provision for the theatres. Due to the limited timeframe certain noncompliance areas will be temporary filled, photographed and recorded for future repair.
- Burwood 2nd MRI. Delays to the procurement of the faraday cage installation contractor and the change of procurement strategies continue to push this project out. This is currently being managed by procurement. The use of an alternative contractor will create additional budget pressure due to existing agreements.
- Impact of changes to the Building Act and Seismic assessment methodology continue to be assessed in relation to DHB buildings. Some buildings will be assessed at a higher % NBS than previously, but it is likely that more buildings will be deemed to be EQ prone than is currently the case. There are significant cost implications arising from these changes as strengthening schemes are likely to cost more and existing engineering reports are no longer valid as a basis for concentable strengthening work.
- Work is about to commence on reconciling CDHB buildings that have been placed on the National EQ prone buildings register with those that we understand to be EQ prone. There appears to be a discrepancy between the information CERA has provided to CCC and our own records.

4. APPENDICES

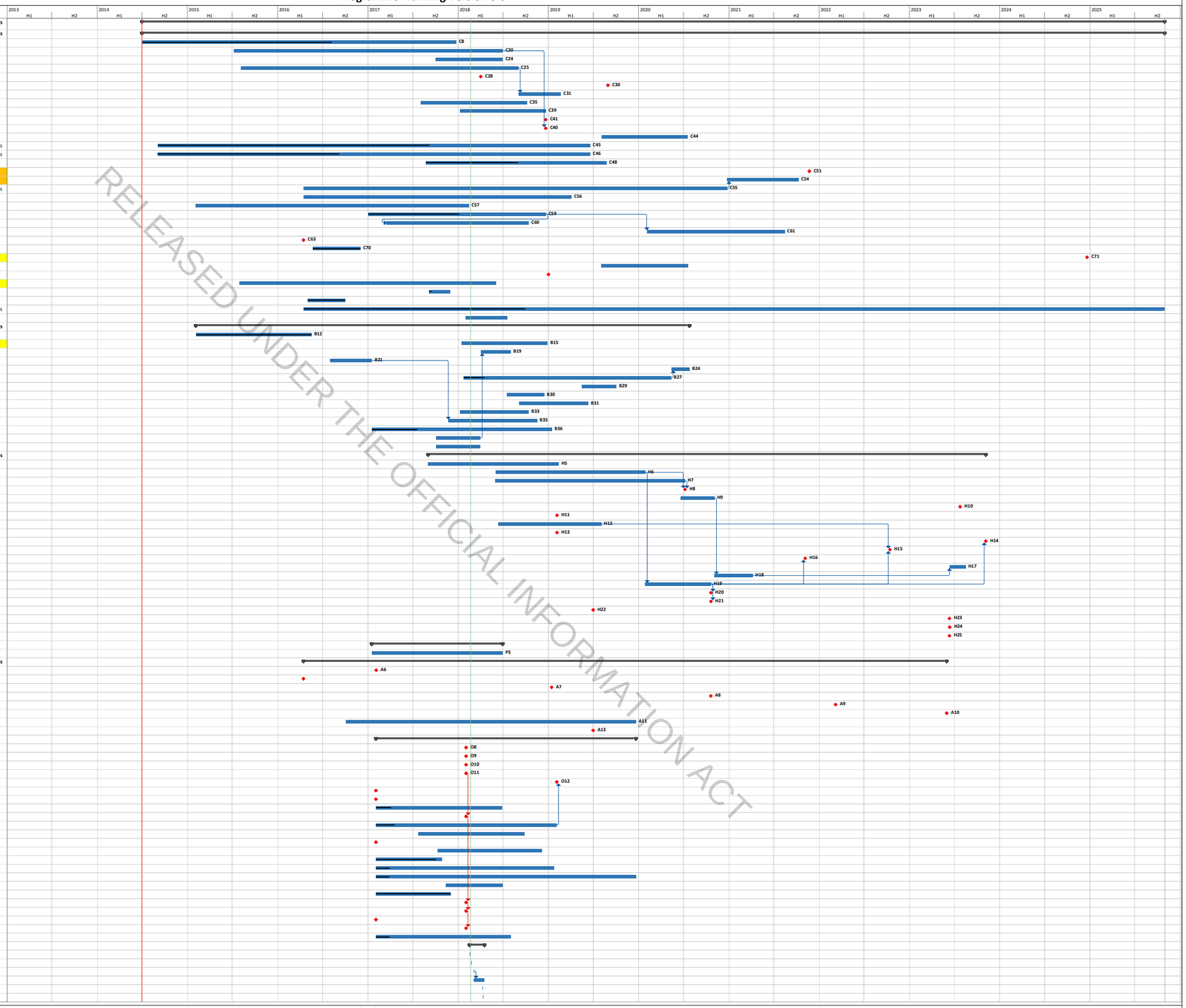
Appendix 1:	Detailed Project Status Reports
Appendix 2:	Master Programme
Appendix 3:	SRDU Health and Safety External Audit

Report prepared by:	Brad Cabell, Programme Director - Construction & Property
Report approved for release:	Justine White, GM Finance & Corporate Services Mary Gordon, EMT Lead Facilities & Executive Director of Nursing

Canterbury District Health Board
Te Poari Hauora o Waitaha

CDHB Redevelopment Unit
Programme Planning Version 3.0

	MoH		Resource Initials	Start	Finish	Duration
1		**CDHB Site Redevelopment Projects**		**Tue 1/07/14**	**Wed 29/10/25**	**2907 days**
2		**Christchurch Campus**		**Tue 1/07/14**	**Wed 29/10/25**	**2907 days**
3	C8	DHB wide EQ repairs (1617 Campus budget)	RR	Tue 1/07/14	Fri 22/12/17	866 days
4	C20	New Outpatient: OP & Dental (Project)	CM	Wed 8/07/15	Fri 29/06/18	742 days
5	C24	Diabetes building Demo	CM	Mon 2/10/17	Fri 29/06/18	186 days
6	C25	**ASB Development**		Wed 5/08/15	Fri 31/08/18	767 days
7	C28	Avon Generator building (Relocate to ASB plant room)		Mon 2/04/18	Mon 2/04/18	0 days
8	C30	Carpark Public New St Asaph St (Private funding)	MOH	Fri 30/08/19	Fri 30/08/19	0 days
9	C31	Carpark Public New ASB (Private Funding)	MOH	Mon 3/09/18	Tue 19/02/19	122 days
10	C35	235 Antigua Demo (exclude Boiler House)	CM	Tue 1/08/17	Fri 5/10/18	300 days
11	C39	Food Services - Remaining EQ repairs		Mon 8/01/18	Fri 21/12/18	250 days
12	C41	Food Services Floor bracing & upgrade (subject to master planning)		Fri 21/12/18	Fri 21/12/18	0 days
13	C40	Kitchen Decanting ($ TBA)		Fri 21/12/18	Fri 21/12/18	0 days
14	C44	Oncology Upgrade		Mon 5/08/19	Fri 17/07/20	250 days
15	C45	Canterbury Health Lab - Stairs & associated wall panels EQR	RR	Wed 3/09/14	Tue 18/06/19	1200 days
16	C46	Canterbury Health Lab - removal of remaining external full height panels	RR	Wed 3/09/14	Tue 18/06/19	1200 days
17	C48	Canterbury health Lab Internal & remaining external EQR	RR	Thu 24/08/17	Fri 23/08/19	513 days
18	C51	Oxygen Compound EQ repairs		Mon 22/11/21	Mon 22/11/21	0 days
19	C54	**Parkside/Clinical Services Block Links upgrade**	GB	Thu 24/12/20	Fri 8/10/21	207 days
20	C55	**Clinical Services Blk Plant room Part 1**		Fri 15/04/16	Wed 23/12/20	1200 days
21	C56	**Clinical Services Blk Plant room Part 2**		Fri 15/04/16	Wed 3/04/19	750 days
22	C57	**Clinical Services Block - Upgrade**		Mon 2/02/15	Mon 12/02/18	750 days
23	C59	Christchurch Women's - Stairs EQR		Tue 3/01/17	Fri 21/12/18	500 days
24	C60	Christchurch Women's - EQ repairs (Part 1)		Wed 15/03/17	Fri 12/10/18	400 days
25	C61	Christchurch Women's - EQ repairs (Part 2)	RR	Mon 3/02/20	Fri 13/08/21	400 days
26	C63	Riverside External EQ repair (Subject to Master Plan)		Fri 15/04/16	Fri 15/04/16	0 days
27	C70	Riverside Access Road Ground Improvement	GB	Mon 23/05/16	Wed 30/11/16	135 days
28	C71	Critical Structural weakness (CDHB wide allowance)	RR	Fri 20/12/24	Fri 20/12/24	0 days
29		Oncology Bunkers extension		Fri 2/08/19	Fri 17/07/20	251 days
30		Parkside Panels (Subject to Masterplan and HRPG)		Tue 1/01/19	Tue 1/01/19	0 days
31		Alternative MTHW Source for ASB (Plan B) Part of District Energy		Thu 30/07/15	Fri 1/06/18	706 days
32		Paediatric Admin Relocation	CM	Tue 5/09/17	Wed 29/11/17	60 days
33		MRI Installation Parkside (delivery 17/9/16)	RR	Mon 2/05/16	Fri 30/09/16	108 days
34		Chch Campus Quantitative Fire Analysis	SH	Fri 15/04/16	Wed 29/10/25	2464 days
35		Nuclear Medicine CT Scanner & upgrade	S	Thu 1/02/18	Wed 18/07/18	6 mons
36		**Burwood Campus**		**Wed 4/02/15**	**Fri 24/07/20**	**1387 days**
37	B12	BWD Boilers replacement (brought fwd)		Wed 4/02/15	Mon 16/05/16	316 days
38	B15	Boiler House Demo & repair to maintenance		Mon 15/01/18	Fri 28/12/18	250 days
39	B19	Physical Medicine (Gym, offices)		Mon 2/04/18	Tue 31/07/18	87 days
40	B21	Ortho Outpatient/BSU Hostel EQ repairs & upgrade		Mon 1/08/16	Mon 16/01/17	113 days
41	B24	Ortho Rehab unit (ORU) Upgrade Phase 2		Tue 12/05/20	Fri 24/07/20	54 days
42	B27	Spinal unit EQ repairs/Upgrade	BH	Mon 22/01/18	Mon 11/05/20	601 days
43	B29	Nurses Hostel West repair/upgrade		Fri 17/05/19	Wed 2/10/19	99 days
44	B30	Old Surgical Block (excl BOPU) EQ Repairs & upgrade		Mon 16/07/18	Fri 14/12/18	110 days
45	B31	Surgical Services Unit EQ repairs		Mon 3/09/18	Mon 10/06/19	201 days
46	B33	Admin (main entrance remaining) EQ repairs & upgrade		Mon 8/01/18	Fri 12/10/18	200 days
47	B35	Admin Maori Health Admin2 EQ Repairs		Wed 22/11/17	Thu 15/11/18	250 days
48	B36	Birthing Unit/ Brain Injury Demo	BH	Mon 16/01/17	Mon 14/01/19	507 days
49		BWD MRI relocation from Merivale	BH	Tue 3/10/17	Fri 30/03/18	6 mons
50		BWD New Ambulance Entrance	BH	Tue 3/10/17	Fri 30/03/18	120 days
51		**Hillmorton Campus**		**Fri 1/09/17**	**Mon 6/11/23**	**1602 days**
52	H5	Food services Building (upgrade)		Fri 1/09/17	Mon 11/02/19	368 days
53	H6	Laundry Building (new) To be rescheduled		Fri 1/06/18	Mon 27/01/20	432 days
54	H7	Laundry Boiler & Boiler House (new) To be rescheduled		Fri 1/06/18	Mon 6/07/20	547 days
55	H8	Laundry existing Demo		Mon 6/07/20	Mon 6/07/20	0 days
56	H9	Fergusson upgrade/EQ repairs (external)		Fri 19/06/20	Mon 2/11/20	97 days
57	H10	Kiwi Kids EQ upgrade/repairs		Mon 24/07/23	Mon 24/07/23	0 days
58	H11	Hillmorton Energy Centre upgrade/EQ repairs		Tue 5/02/19	Tue 5/02/19	0 days
59	H12	Te Whare Manaaki Forensic Services EQ Repairs	SH	Mon 11/06/18	Fri 2/08/19	300 days
60	H13	SI Regional Forensic Plan (Crown)		Tue 5/02/19	Tue 5/02/19	0 days
61	H14	Youth Spec Services upgrade/EQ repairs		Mon 6/11/23	Mon 6/11/23	0 days
62	H15	Recreation Centre upgrade/EQ repairs		Fri 14/10/22	Fri 14/10/22	0 days
63	H16	Te Awakura EQ repairs (Main building & Gym)		Fri 5/11/21	Fri 5/11/21	0 days
64	H17	Training & Library upgrade/EQ repairs		Mon 12/06/23	Tue 15/08/23	47 days
65	H18	Administration Upgrade/EQ Repairs		Tue 3/11/20	Tue 6/04/21	111 days
66	H19	Supply Building (new)		Tue 28/01/20	Mon 19/10/20	190 days
67	H20	Oral Health Clinic EQ repairs		Mon 19/10/20	Mon 19/10/20	0 days
68	H21	Other HM upgrades		Mon 19/10/20	Mon 19/10/20	0 days
69	H22	Aroha Pai upgrade		Mon 1/07/19	Mon 1/07/19	0 days
70	H23	Te Waimokihi upgrade		Mon 12/06/23	Mon 12/06/23	0 days
71	H24	Te Whare Mauri Ora upgrade		Mon 12/06/23	Mon 12/06/23	0 days
72	H25	Tapuna Village upgrade		Mon 12/06/23	Mon 12/06/23	0 days
73		**TPMH Campus**		**Mon 16/01/17**	**Fri 29/06/18**	**366 days**
74	P3	Mental Health services (Mothers & Babies, Eating Disorder, Child &	CM	Mon 16/01/17	Fri 29/06/18	366 days
75		**Ashburton and Rural**		**Fri 15/04/16**	**Thu 1/06/23**	**1835 days**
76	A6	Ashburton IFHC (Private)		Thu 2/02/17	Thu 2/02/17	0 days
77		Ashburton Hospital new build & Block C & D refurb	SR	Fri 15/04/16	Fri 15/04/16	0 days
78	A7	Oxford Upgrade (Planning and Funding Decision Required)		Mon 14/01/19	Mon 14/01/19	0 days
79	A8	Waikari Upgrade (Planning and Funding Decision Required)		Mon 19/10/20	Mon 19/10/20	0 days
80	A9	Darfield Upgrade (Planning and Funding Decision Required)		Tue 8/03/22	Tue 8/03/22	0 days
81	A10	Lincoln/Ellesmere upgrade (Planning and Funding Decision Required)		Thu 1/06/23	Thu 1/06/23	0 days
82	A11	Akaroa IFHC Stage 1	SR	Mon 3/10/16	Fri 20/12/19	818 days
83	A13	Ashburton Maternity EQ repairs		Mon 1/07/19	Mon 1/07/19	0 days
84		**Other Sites / Projects**		**Thu 2/02/17**	**Fri 20/12/19**	**738 days**
85	O8	181 & 185 Linwood Ave EQ repairs		Fri 2/02/18	Fri 2/02/18	0 days
86	O9	173 Riccarton Road EQ repairs		Fri 2/02/18	Fri 2/02/18	0 days
87	O10	40 Gracefield Ave Demo		Fri 2/02/18	Fri 2/02/18	0 days
88	O11	Community Dental various EQ repairs		Fri 2/02/18	Fri 2/02/18	0 days
89	O12	Central City Hub (Private)		Mon 4/02/19	Mon 4/02/19	0 days
90		Montreal House	SR	Thu 2/02/17	Thu 2/02/17	0 days
91		Rangiora Mobile Surgical Unit	BG	Thu 2/02/17	Thu 2/02/17	0 days
92		Project Management Office (PMO)	BG / IC	Thu 2/02/17	Tue 26/06/18	350 days
93		Kaikoura EQ Repairs	TF	Fri 2/02/18	Fri 2/02/18	0 days
94		Old CWH Site	SH / RC	Thu 2/02/17	Sat 2/02/19	508 days
95		HREF (overview)	GB	Mon 24/07/17	Thu 27/09/18	300 days
96		Ophthalmology Demo	CM	Thu 2/02/17	Thu 2/02/17	0 days
97		Home Dialysis Training Centre to St Asaph	BG	Mon 9/10/17	Mon 3/12/18	292 days
98		3rd Feeder Main CHCH Campus	BG	Thu 2/02/17	Fri 27/10/17	186 days
99		Rangiora Health Hub Stage 3	BG	Thu 2/02/17	Tue 22/01/19	500 days
100		Hillmorton PSAID refurb	SH	Thu 2/02/17	Fri 20/12/19	738 days
101		Taurangi Plant Rooms	BG	Mon 13/11/17	Fri 29/06/18	157 days
102		Burwood Drainage Repairs	SH	Thu 2/02/17	Fri 1/12/17	210 days
103		Hillmorton Cotter Trust		Fri 2/02/18	Fri 2/02/18	0 days
104		ASB Carpark overview		Fri 2/02/18	Fri 2/02/18	0 days
105		550 Hagley Ave / Diabetes / HDTC building Demolition	CM	Thu 2/02/17	Thu 2/02/17	0 days
106		TPMH West spoke for OPH community team relocation		Fri 2/02/18	Fri 2/02/18	0 days
107		Relocation of Hagley Outpatients to Rangiora	BG	Thu 2/02/17	Tue 31/07/18	375 days
108		**Reprioritisation Framework**		**Fri 16/02/18**	**Mon 16/04/18**	**42 days**
109		Reprioritisation Framework - Training		Fri 16/02/18	Fri 16/02/18	1 day
110		Reprioritisation Framework - Workshops Stage 1 - Hillmorton		Thu 22/02/18	Thu 22/02/18	1 day
111		Reprioritisation Framework - Workshops Stage 1 - Burwood		Mon 5/03/18	Mon 5/03/18	1 day
112		Reprioritisation Framework - Engineering Review		Tue 6/03/18	Mon 16/04/18	30 days
113		Reprioritisation Framework - Workshop Stage 2 - Hillmorton		Mon 9/04/18	Mon 9/04/18	1 day
114		Reprioritisation Framework - Workshop Stage 2 - Burwood		Wed 11/04/18	Wed 11/04/18	1 day



FACILITIES UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members**
Facilities Committee

SOURCE: **Site Redevelopment/Finance**

DATE: **12 April 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper is a standard agenda item to the Facilities Committee providing an overview of progress with approved projects. A more detailed paper is provided to the Committee quarterly, which also goes to the Canterbury DHB Board and the Hospital Redevelopment Partnership Group (*HRPG*) on a quarterly basis.

2. RECOMMENDATION

That the Committee:

i. notes the Facilities Update report.

3. SUMMARY – FACILITIES UPDATE

Approved projects are progressing as planned with the main updates since the previous report as outlined below

General EQ repairs within Christchurch campus

- Parkside Panels: Detailed planning is continuing for disconnecting the Chemo Day Ward for Parkside. This may require partial decanting of the ward. Still awaiting pricing from ASB Link contractor for this work. Design work for replacing confined corner panels is proceeding well now that a number of technical fire and durability issues have been resolved.
- Clinical Service Block roof strengthening above Nuclear Medicine: Current delivery dates for the equipment are forecast for the end of July 2018. The programme for construction is reliant on this date. Design consultants are progressing well with integrating detailed user requirements into the design. Registrations of Interest for main contractors responses received.
- Lab Stair 3 on programme for completion end of May. Lab Stair 4 initial/scoping work to begin. Some work to the plant room will need to be undertaken before the completion of Lab Stair 3 and when the Eye Department are still in the Portacoms.
- Concept Design for strengthening of Parkside link to CSB is complete and has been priced by the Quantity Surveyor. A decision is still awaited on whether to proceed with these works.

Christchurch Women's Hospital

- Stair 2: Awaiting review from fire engineer to enable planning as part of the overall Women's Risk analysis.
- Level 4: Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels.

- Level 5: Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time.
- Level 3: All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering.**
  a. Database designs complete and in use by Site Redevelopment on current passive work.
  b. Test rig complete and installer testing has commenced. RFP for materials is currently in final review by SRU/M&E/Procurement.
  c. Currently working with ISG/Developers for options to transfer database to a cloud base system complete with E form and onsite inspection capability via IPad/ Android phone apps. Draft Policy and Guidelines issued to M&E and Senior Management. SRU continue to upgrade on project to project basis until comment/ advice received.
  d. Continue to identify more non-compliant areas as other projects open walls/ ceilings.
- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*).
  a. Service Tunnel: Complete. Steam provided by coal boilers.
  b. Energy Centre: Procurement of boilers documentation being prepared.
  c. Re assessment of capacity requirements has been undertaken which has highlighted the need for more capacity. This is based on draft information provided by the Ministry around the master planning process.
- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until boiler requirements have been resolved for the new energy centre and new energy centre commissioned.
- **Parkside renovation project to accommodate clinical services, post ASB (managed by MoH):** Health planners appointed and planning underway. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. Draft master plans have been provided for review. The SRU team are having regular meetings with the MoH project managers (Projex) to assist in their information gaps.
- **Back up VIE tank:** Work on developing a target strength for the VIE enclosure is ongoing. Balancing operational and post-disaster requirements against cost and build ability is a key focus for this work.
- **New Outpatient project (managed by MoH**): Façade 90% complete. Architectural/ services fit out on all floors well underway. Rev 5.0 programme issued: with SP1 date 29 June. SP2 20 July. Construction completion still to be confirmed.
- **Avon Generator Switch Gear and Transformer Relocation**. Design work underway. Due to the small size and engineering component this is now being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro programme slipped – new dates due 28 March. Antigua St open 9 April. Oxford Gap closed 10 April to Nov 2018. Land swap discussion still with LINZ.
- **Parkside Canopies:** Temporary repairs to plastic wrap have been made. Planning underway to replace the wrap at the main entry.

Burwood Hospital Campus

- **Burwood New Build**: Defects are being addressed as they come to hand.

- **Burwood Admin old main entrance block:** Feasibility study complete and work to commence on repurposing building to accommodate community teams for TPMH. Awaiting availability of internal project management resource to take this work forward.
- **Burwood Mini Health Precinct:** Internal project management resource has been identified to scope out options for detailed business case (new build vs relocatable). Programme is dependent on demolition of Birthing Unit.
- **Drainage repairs**: Work complete.
- **Spinal Unit:** Design and user group process continues. ROI process completed. Five building contractors identified. Schedule of Quantities being prepared. RFP process scheduled for 9 April 2018.
- **Burwood Birthing/Brain Injury Demolition**: Methodology to be agreed. External Project managers commissioned to undertake work. Programme from commencement of demolition could take up to 12 months to complete due to the complex nature of asbestos removal and the proximity of other clinical facilities. Existing switch board work, servicing other parts of the campus, 90% complete. Design work to commence in early February. ROI process completed. Five demolition specialist companies identified. RFP to demolition contractors is out to the market. Decommissioning of building main switchboard and ISG systems under way with completion due by April 2018.
- **Burwood Tunnel Repairs:** Work has been scoped and priced. Expected start is April 2018 as contract approvals have not been received.
- **2nd MRI Installation:** Design work and planning continues. MRI scanner temporarily relocated from Merivale to storage at Print Place. Faraday cage installation is being repriced by another provider. A new MRI has now been sourced with the original Merivale MRI traded in as part of the procurement process. Scope of works being finalised and costed with Siemens.
- **Decision making frame work**: First workshop took place on 5 March 2018. Upgrade options are now being developed for all remaining buildings on campus for review at the second workshop on 11 April 2018.

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building**. High level cost estimates completed in 2013 are currently being reviewed and updated to 2018. Strengthening works recommendation to follow.
- **Cotter Trust** on-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Review of all Forensic services including PSAID, AT&R, Roko being completed, including refurbishment verses rebuild cost and logistic process. Awaiting results of clinical review. Concept design for AT&R built at Design Lab has been reviewed by staff. All Design Lab work complete. Designs returned from Architect. Business case currently in programme for approval.
- **Decision making frame work**: First workshop took place 22 Feb 2018. Upgrade options are now being developed for all remaining buildings on campus for review at the second workshop on 9 April 2018.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** The Feasibility study is now complete and work is to commence shortly on repurposing the old Burwood Administration building to accommodate community teams

- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in Sept 2017. The next step is the development of Detailed Business Case which is planned for July 2018 for submission.

Ashburton Hospital & Rural Campus

- Stage 1 and 2 works are both complete. Final claims have been agreed with the contractor. Final defects resolution and retention release expected by June 2018.
- **Tuarangi Plant Room**: Upgrade of access and egress systems. Options have been provided by the Architect and Safety consultant. Meeting held on site with Architects, Safety Consultant, SRU and M&E. Many options explored and discussed. Agreement in principal of probable solutions. Architect to draw up ideas for approval and progress to next stage/funding.
- **New Boiler and Boiler House**: Project process commenced. This is being managed by M&E.

Other Sites/Work

- **Decision Making Frame Work:** This work is now being led by Planning and Funding. Workshops have been scheduled to occur Feb to April 2018 for both the Burwood and Hillmorton campuses. Resilient Organisation Ltd have been contracted by Planning and Funding to assist with this process. SRU will continue to be heavily involved to ensure a streamlined process is achieved. First workshops have occurred and design work is underway on over 20 buildings to determine upgrade options and enable prioritisation decisions.
- **Akaroa Health Hub**. Construction on site has commenced. Early stages of demolition and site scrape will be underway shortly.
- **Kaikoura Integrated Family Health Centre**: Code compliance received. Scoping of cosmetic damage due to November's earthquake is complete. Estimates provided to Corporate Finance. Driveway repair completed. Sound proofing underway. Beca working on repair strategy.
- **Rangiora Health Hub**: Design complete. Building consent application lodged with Waimakariri District Council mid-January. Main contractor ROI on GETS. Value Engineering exercise taking place. Current MoH date for the Hagley Outpatients building still to be confirmed.
- **Home Dialysis**. Business case approved by Board. Concept drawing agreed and sent out to consultants.
- **SRU**. Project Management Office manuals re-write and systems overview. Approximately 55% complete. Aligning with P3M3 process and documentation where appropriate.
- **Seismic Monitoring**: Business Case approved. RFP documentation being developed.
- **Laundry Building**: Currently under review for options to fix based on a change of use possibly for CDHB store/warehouse and other facilities. Feasibility study underway.
- **New Laundry:** SRU continuing to assist CLS with procurement of construction advice for the new design/build/lease laundry facility.
- **HREF:** SRU continues to be involved in providing construction and contract administration/interpretation advice to the HREF project. Completion expected in early June.
- **Annual Damage reviews:** Planning is underway for the 2018 repeat damage assessment of the DHB's building stock.

Project/Programme Key Issues

- The recent notification of Fletcher Construction closing down their building and interiors division will have effects on current work programmes and pricing. SRDU are currently working through outstanding work faces and projects to identify the risks and issues for delivery of these projects. Meetings organised with Fletchers senior management.
- The lack of a detailed Master Plan for the Hillmorton campus is still affecting our ability to provide a comprehensive EQ decision making assessment. We continue to use the framework adopting a more granular approach to determine outcomes.
- Additional peer reviews of Parkside and Riverside structural assessments, being undertaken by the MoH, are now complete. Clarity on the direction of the Master Planning process is required to plan the next stage of the POW. This is also having an effect on the sizing and future proofing of energy supply from the proposed boiler house.
- Delays to the programme of works continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. The urgent works undertaken to facilitate the MoH run link corridor works has further affected this. Restricted access has been given to one area.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up, but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.
- Passive fire issues are now being raised in the labs building. Work completed and in final review. Potential passive fire issues around comm floor 80 and use of all proof collars at outpatients, ASB and Burwood are currently under review. We will work with contractors, designers and the Ministry to ensure we get the appropriate systems installed.
- Uncertainty of delivery of MoH projects continues to affect our ability to programme projects and allocate resources efficiently. Rangiora is one example in this space. A firm date from the MoH is still not able to be provided with any level of confidence.
- Proposed ASB Western Link – a number of constraints and issues have been identified by CDHB and these are being worked through with assistance from SRU. The requirements of additional decant space, the responsibility for undertaking the work and payment of costs is still to be addressed by the MoH as they are an ASB related project work face. Additional passive fire noncompliance has been found in areas of the proposed new links during opening works. Site Redevelopment have provided support and design details to mitigate risks to service provision for the theatres. Due to the limited timeframe certain noncompliance areas will be temporary filled, photographed and recorded for future repair.
- Burwood 2nd MRI. Delays to the procurement of the faraday cage installation contractor and the change of procurement strategies continue to push this project out. This is currently being managed by procurement. The use of an alternative contractor will create additional budget pressure due to existing agreements.
- Impact of changes to the Building Act and Seismic assessment methodology continue to be assessed in relation to DHB buildings. Some buildings will be assessed at a higher % NBS than previously, but it is likely that more building will be deemed to be EQ prone than is currently the case. There are significant cost implications arising from these changes as strengthening schemes are likely to cost more and existing engineering reports are no longer valid as a basis for consentable strengthening work.

- Work is about to commence on reconciling CDHB buildings that have been placed on the National EQ prone buildings register with those that we understand to be EQ prone. There appears to be a discrepancy between the information CERA has provided to CCC and our own records. CCC has now formally requested the DHB to provide copies of our most recent engineering assessments.

4. APPENDICES

Appendix 1: Detailed Project Status Reports
Appendix 2: Safety Report

Report prepared by: Brad Cabell, Programme Director - Construction & Property

Report approved for release: Mary Gordon, EMT Lead Facilities & Executive Director of Nursing

[redacted]

QUARTERLY FACILITIES/EARTHQUAKE POW UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members**
Facilities Committee

SOURCE: **Site Redevelopment**

DATE: **17 May 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper provides a more detailed update on the Earthquake / Facilities Programme of Works (*POW*). This paper is provided on a quarterly basis, and also goes to the Hospital Redevelopment Partnership Group (*HRPG*). In addition, this paper is provided to the CDHB Board and Quality, Finance, Audit and Risk Committee for information.

2. RECOMMENDATION

That the Committee:

i. notes:
- the quarterly Programme of Works (*POW*) report as at April 2018, as outlined in Appendix 1 and that this report has four sections (as requested by the Committee):
  - yet to be approved projects;
  - approved work-in-progress projects;
  - completed projects; and
  - excluded/deferred projects;
- the Facilities update summary by campus, as provided in Appendix2;
- the detailed project status reports for major projects that are underway, including the Site Safety Review Reports, as provided in Appendix 3;

ii. notes the major changes are:
- Item "R1b – Tunnel Work" – Steam changeover completed. The 7 x temporary boilers have been removed;
- Item "R2 - ChCh Hospital campus master plan" - Draft Christchurch Hospital Campus Master Plan Indicative Business Case was submitted to the 27 March 2018 CDHB Board special meeting and the Board approved "Option A" to proceed to a Detail Business Case. The Board also instructed the following work to occur as a matter of urgency:
  - design and fit out of the lower ground floor of ASB as clinical support space;
  - design an alternative kitchen location in the lower ground floor of Woman's; and
  - finalise and design location for café and clean docks;
- Item "R2a – ChCh Hospital campus master plan Parkside external panels restraint" design has been completed and costed. Proposal for the construction has been submitted to 17 May 2018 CDHB Board for approval, to be funded from PoW Item R2 "Christchurch Hospital campus master plan" budget, as outlined in the last report;
- Item "C24a – Diabetes Building: Relocation of the Home Dialysis service to 16/18 St Asaph street / 66 Stewart Street" budget of $2.286m has been approved at the

February 2018 Board meeting and submitted to the March 2018 HRPG meeting for noting;

- Item "B36 – Burwood Birthing Unit (previously called Ward 7 & 8" - design for the demolition has been completed. Proposal for the demolition has been submitted to the 17 May 2018 Facilities Committee for recommending to the 21 June 2018 Board for approval;

iii. notes that the indicative funding gap within the POW budget is still about $21.8M (no change from the last quarterly report); and

iv. notes the indicative cashflow plan for Site Redevelopment managed projects; as outlined in Appendix 4.

3. SUMMARY

	Re-Prioritised Budget (Jan 2018)	Re-Prioritised Budget (April 2018)
Subtotal for Priority Ringfenced Projects	[redacted]	[redacted]
Christchurch Campus - Subtotal	[redacted]	[redacted]
Burwood Campus - Subtotal	[redacted]	[redacted]
Hillmorton Campus - Subtotal	[redacted]	[redacted]
TPMH Campus - Subtotal	[redacted]	[redacted]
Ashburton Campus - Subtotal	[redacted]	[redacted]
Other Sites Campus - Subtotal	[redacted]	[redacted]
Total Requirements	$ [redacted]	[redacted]
Indicative Funding Shortfall	-$ [redacted]	[redacted]
POW Total Budget	$ [redacted]	[redacted]

4. APPENDICES

Appendix 1: Quarterly Programme of Works Summary
Appendix 2: Facilities Update Summary by Campus
Appendix 3: Project Status Reports & Safety Reports
Appendix 4: Site Redevelopment Managed Projects Cashflow

Report prepared by: Brad Cabell, Programme Director - Construction & Property
Beng-Cheng Chan – Corporate Support

Report approved for release: Mary Gordon, Executive Director of Nursing / EMT Lead Facilities

FACILITIES UPDATE SUMMARY BY CAMPUS

Canterbury District Health Board
Te Poari Hauora ō Waitaha

SUMMARY – FACILITIES UPDATE

Approved projects are progressing as planned with the main updates since the previous report as outlined below

General EQ Repairs within Christchurch Campus

- Parkside Panels: Detailed planning is continuing for disconnecting the Chemo Day Ward for Parkside. This may require partial decanting of the ward. Design work for replacing confined corner panels has finished. Applications for consent exemption have been lodged, and contract documentation is being prepared. Pricing negotiations are ongoing with the ASB link main contractor.
- Clinical Service Block roof strengthening above Nuclear Medicine: Current delivery dates for the equipment are forecast for the end of September 2018. The programme for construction is reliant on this date. Design consultants are reviewing detailed user requirements. Registrations of Interest for main contractors' responses received and value engineering the design to bring within budget.
- Lab Stair 3: Two weeks behind programme for completion end of May. Lab Stair 4: Initial / scoping work to begin. Some work to the plant room will need to be undertaken before the completion of Lab Stair 3 and when the Eye Department is still in the Portacoms.

Christchurch Women's Hospital

- Stair 2: Awaiting review from fire engineer to enable planning as part of the overall Women's Risk analysis. This continues to be delayed due to the release of the master plan which is required to determine available space for decanting of clinical spaces.
- Level 4: Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels, but will endeavour to pick this up during Women's Passive Fire works.
- Level 5: Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time, but will endeavour to pick this up during Women's Passive Fire works.
- Level 3: All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering.**
  a. Database designs complete and in use by Site Redevelopment on current passive work. Currently developing brief for digitalization of the passive fire system and database and within the digitalization programme the forms and documents will be updated to e-forms. Awaiting M&E senior management to approve / comment on draft policies.
  b. Test rig complete and installer testing has commenced. RFP for materials complete, primary and secondary suppliers in final contract preparation stage.
  c. Continue to identify more non-compliant areas as other projects open walls/ ceilings.
- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*).
  a. Service Tunnel: Complete. Steam provided by coal boilers. Final connection for Outpatients and ASB still to be completed.

b. Energy Centre: ROI for boilers under evaluation.

- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until new energy centre commissioned.
- **Parkside renovation project to accommodate clinical services, post ASB (managed by MoH):** Health planners appointed and planning underway. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. Draft master plans have been provided for review. The SRDU team are having regular meetings with the MoH project managers (Projex) to assist in their information gaps.
- **Back up VIE tank:** Proposed strengthening scheme under review. Balancing operational and post-disaster requirements against cost and build ability is a key focus for this work.
- **New Outpatient project (managed by MoH**): Façade 99% complete. Architectural / services fit out on all floors well underway. Rev 5.3 programme rejected. Construction completion still to be confirmed.
- **Avon Generator Switch Gear and Transformer Relocation**. Design work underway. Due to the small size and engineering component this is now being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro programme slipped – Antigua St open 19 April. Oxford Gap closed 7 April to December 2018. Land swap discussion still with LINZ.
- **Parkside Canopies:** Temporary repairs to plastic wrap have been made. Planning underway to replace the wrap at the main entry.
- **Hagley Outpatients 2 Storey demolition:** Demolition contractor ROI is currently on GETS.

<u>Burwood Hospital Campus</u>

- **Burwood New Build**: Defects are being addressed as they come to hand which includes noncompliance of passive fire.
- **Burwood Admin old main entrance block:** Feasibility study complete and work to commence on repurposing building to accommodate community teams for TPMH. Awaiting availability of internal project management resource to take this work forward.
- **Burwood Mini Health Precinct:** Internal project management resource has been identified to scope out options for detailed business case (new build vs relocatable). Programme is dependent on demolition of Birthing Unit.
- **Spinal Unit:** Design and user group process continues. ROI process completed. Five building contractors identified. Schedule of Quantities being prepared. RFP process scheduled for 1 May 2018.
- **Burwood Birthing/Brain Injury Demolition**: Methodology to be agreed. External Project managers commissioned to undertake work. Programme from commencement of demolition could take up to 12 months to complete due to the complex nature of asbestos removal and the proximity of other clinical facilities. Existing switch board work, servicing other parts of the campus, 90% complete. Design work commenced in early February. ROI process completed. Five demolition specialist companies identified. RFP tenders received. Evaluation held 30 April. Decommissioning of building main switchboard and ISG systems under way with completion due by May 2018.
- **Burwood Tunnel Repairs:** Work has been scoped and priced. Expected start is May 2018.
- **2nd MRI Installation:** Design work and planning continues. MRI scanner temporarily relocated from Merivale to storage at Print Place. Faraday cage installation is being repriced by another provider. A new MRI has now been sourced with the original

Merivale MRI traded in as part of the procurement process. Scope of works being finalised and costed with Siemens.

- **Decision making frame work**: Workshops have been completed. Planning and Funding to complete final report

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building** Previously completed strengthening schemes have been reviewed and concept cost estimates updated. Recommendation to strengthen to 67% IL2 required endorsement from EMT Sub-committee.
- **Cotter Trust** on-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Review of all Forensic services including PSAID, AT&R, Roko being completed, including refurbishment verses rebuild cost and logistic process. Awaiting results of clinical review. Concept design for AT&R built at Design Lab has been reviewed by staff. All Design Lab work complete. Business case approved. RFP for design consultants prepared and signed off. Loading up onto GETS week commencing 30 April 2018.
- **Decision making frame work**: Workshops have been completed. Planning and Funding to complete final report.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** The Feasibility study is now complete and work is to commence shortly on repurposing the old Burwood Administration building to accommodate community teams.
- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in September 2017. Next step is development of the Detailed Business Case which is planned for July 2018 for submission.

Ashburton Hospital & Rural Campus

- Stage 1 and 2 works are both complete. Final claims have been agreed with the contractor. Final defects resolution and retention release expected by June 2018.
- **Tuarangi Plant Room**: Concept drawing completed and safety consultant report received. Now looking to hand over to M&E to implement.
- **New Boiler and Boiler House**: Project process commenced. This is being managed by M&E.

Other Sites/Work

- **Decision Making Frame Work:** This work is now being led by Planning and Funding. Workshops have been scheduled to occur Feb to April 2018 for both the Burwood and Hillmorton campuses. Resilient Organisation Ltd have been contracted by Planning and Funding to assist with this process. SRU will continue to be heavily involved to ensure a streamlined process is achieved. Workshops have been completed and the final report is currently being compiled.
- **Akaroa Health Hub**. Construction progressing. Retaining walls and major earthworks are in progress.
- **Kaikoura Integrated Family Health Centre**: Code compliance received. Scoping of cosmetic damage due to November's earthquake is complete. Estimates provided to

Corporate Finance. Driveway repair completed. Sound proofing underway. Beca working on repair strategy.

- **Rangiora Health Hub**: Value engineering has shown some area for cost saving. Minor work to the design of some elements taking place to realise possible savings. Main contractor ROI closed and ready for evaluation. Availability of Hagley Outpatients building has been set as 1 October 2018.
- **Home Dialysis**. Business case approved by Board. Detailed design commencing. Programme forecast completion in February 2019.
- **SRU**. Project Management Office manuals re-write and systems overview. Approximately 60% complete. Aligning with P3M3 process and documentation where appropriate.
- **Seismic Monitoring**: Business Case approved. RFP documentation being developed.
- **New Laundry:** SRU continuing to assist CLS with procurement of construction advice for the new design / build / lease laundry facility.
- **HREF:** SRU continues to be involved in providing construction and contract administration / interpretation advice to the HREF project. Completion expected in early June.
- **Annual Damage reviews:** Planning is underway for the 2018 repeat damage assessment of the DHB's building stock.

Project/Programme Key Issues

- The recent notification of Fletcher Construction closing down their building and interiors division will have effects on current work programmes and pricing. SRDU continue to review outstanding work faces and projects to identify the risks and issues for delivery of these projects. Meetings held with Fletchers senior management.
- The lack of a detailed Master Plan for the Hillmorton campus is still affecting our ability to provide a comprehensive EQ decision making assessment. We continue to use the framework adopting a more granular approach to determine outcomes.
- Additional peer reviews of Parkside and Riverside structural assessments, being undertaken by the MoH, are now complete. Clarity on the direction of the Master Planning process is required to plan the next stage of the POW.
- Delays to the POW continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. The urgent works undertaken to facilitate the MoH run link corridor works has further affected this. Restricted access has been given to one area.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up, but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.
- Uncertainty of delivery of MoH projects continues to affect our ability to programme projects and allocate resources efficiently. Rangiora is one example in this space. A firm date from the MoH is still not able to be provided with any level of confidence. A date of 1 October is currently being used for programming and contract documents.
- Proposed ASB Western Link – a number of constraints and issues have been identified by CDHB and these are being worked through with assistance from SRDU. The requirements of additional decant space, the responsibility for undertaking the work and payment of costs is still to be addressed by the MoH as they are an ASB related project

work face. Additional passive fire noncompliance has been found in areas of the proposed new links during opening works. Site Redevelopment have provided support and design details to mitigate risks to service provision for the theatres. Due to the limited timeframe certain noncompliance areas will be temporary filled, photographed and recorded for future repair.

- Burwood 2nd MRI. Delays to the procurement of the faraday cage installation contractor and the change of procurement strategies continue to push this project out. This is currently being managed by procurement. The use of an alternative contractor will create additional budget pressure due to existing agreements.
- Impact of changes to the Building Act and Seismic assessment methodology continue to be assessed in relation to DHB buildings. Some buildings will be assessed at a higher % NBS than previously, but it is likely that more building will be deemed to be EQ prone than is currently the case. There are significant cost implications arising from these changes as strengthening schemes are likely to cost more and existing engineering reports are no longer valid as a basis for consentable strengthening work. SRDU have started work on assessing these items.
- Work is underway on reconciling CDHB buildings that have been placed on the National EQ prone buildings register with those that we understand to be EQ prone.

FACILITIES UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members**
Facilities Committee

SOURCE: **Site Redevelopment**

DATE: **21 June 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper is a standard agenda item to the Facilities Committee providing an overview of progress with approved projects. A more detailed paper is provided to the Committee quarterly, which also goes to the Hospital Redevelopment Partnership Group (*HRPG*), as well as Canterbury DHB's Board and Quality, Finance, Audit and Risk Committee.

2. RECOMMENDATION

That the Committee:

i. notes the Facilities Update report.

3. DISCUSSION

Approved projects are progressing as planned with the main updates since the previous report as outlined below

General EQ repairs within Christchurch campus:

- **Parkside Panels:** Detailed planning is continuing for disconnecting the Chemo Day Ward for Parkside. Pricing negotiations are ongoing with the ASB link main contractor.
- **Clinical Service Block roof strengthening above Nuclear Medicine:** Current delivery dates for the equipment are forecast for 1 Sep 2018. The equipment will be stored at Print Place. Design consultants are reviewing detailed user requirements. Engineering has brought the design within budget and has CLG approval. Design Team working towards consent / tender documents issue mid-July.
- **Lab Stair 3:** Three weeks behind programme for completion end of May.
- **Lab Stair 4:** Initial / scoping work has begun.

Christchurch Women's Hospital

- **Stair 2:** Awaiting review from fire engineer to enable planning as part of the overall Women's Risk analysis. This continues to be delayed due to the release of the master plan which is required to determine available space for decanting of clinical spaces.
- **Level 4:** Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels, but will endeavour to pick this up during Women's Passive Fire works.
- **Level 5:** Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time, but will endeavour to pick this up during Women's Passive Fire works.
- **Level 3:** All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering**
  a. Database designs complete and in use by Site Redevelopment on current passive work. Currently developing brief for digitalization of the passive fire system and database and within the digitalization programme the forms and documents will be updated to e-forms. Awaiting M&E senior management to approve / comment on draft policies.
  b. Test rig complete and installer testing has commenced. RFP for materials complete, primary and secondary suppliers in final contract preparation stage.
  c. Continue to identify more non-compliant areas as other projects open walls/ ceilings.
- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*).
  a. Service Tunnel: Complete. Steam provided by coal boilers. Final connection for Outpatients and ASB still to be completed.
  b. Energy Centre: ROI for boilers completed.
- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until new energy centre constructed and commissioned.
- **Parkside renovation project to accommodate clinical services, post ASB (managed by MoH):** Planning ongoing. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. Draft master plans have been provided for review. The SRDU team are having regular meetings with the MoH project managers (Projex) to assist in their information gaps.
- **Back up VIE tank:** Proposed strengthening scheme has been approval by CDHB maintenance and currently under review by BOC. Work cannot commence until primary VIE tank becomes operational. This is currently affected by the Antigua Street exit widening works.
- **Antigua St Exit widening:** Work commenced on site 29 May. Due completion end June.
- **New Outpatient project (managed by MoH**): Facade 99% complete. Architectural / services fit out on all floors well underway. Completion programme issued. Certificate of Public Use (*CPU*) 31 Jul. Practical completion 27 Sep.
- **Avon Generator Switch Gear and Transformer Relocation**. Design work underway. Due to the small size and engineering component this is now being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro programme slipped – Antigua St open early Jun. Oxford Gap closed 7 Apr to Dec 2018. Land swap discussion still with LINZ.
- **Parkside Canopies:** Temporary repairs to plastic wrap have been made. Planning underway to replace the wrap at the main entry.
- **Hagley Outpatients 2 Storey demolition:** Demolition contractor ROI is currently on GETS.
- **New Outpatients Cafeteria:** Detail design nearing completion. Business case approved. Contract negotiation with Leighs construction underway and subject to QS review and approval of pricing. Aiming for completion of café on or before occupation.

Burwood Hospital Campus

- **Burwood New Build**: Defects are being addressed as they come to hand.
- **Burwood Admin old main entrance block:** Feasibility study complete and work to commence on repurposing building to accommodate community teams for TPMH. Project management resource available to start 4 Jul 2018.

- **Burwood Mini Health Precinct:** Internal project management resource has been identified to scope out options for detailed business case (new build vs relocatable). Programme is dependent on demolition of Birthing Unit.
- **Spinal Unit:** Construction is being tendered, which closes 13 Jun 2018, to be followed by the tender evaluation process. The Spinal Ward (HG) is to decant into ward FG to enable construction process.
- **Burwood Birthing/Brain Injury Demolition**: A preferred demolition contractor has been identified. Business case has been presented to Facilities Committee and to be approved / endorsed at Board meeting 21 Jun 2018. The demolition programme shows work will be completed in Dec 2018.
- **Burwood Tunnel Repairs:** Work is now largely complete.
- **2nd MRI Installation:** Design work and planning continues. MRI scanner temporarily relocated from Merivale to storage at Print Place. Faraday cage installation is being repriced by another provider. A new MRI has now been sourced with the original Merivale MRI traded in as part of the procurement process. Scope of works being finalised and costed with Siemens.
- **Decision making frame work**: Workshops have been completed. Planning and Funding to complete final report

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building:** Previously completed strengthening schemes have been reviewed and concept cost estimates updated. Recommendation to strengthen to 67% IL2.
- **Cotter Trust:** On-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Review of all Forensic services including PSAID, AT&R, Roko being completed, including refurbishment verses rebuild cost and logistic process. Awaiting results of clinical review. Design consultants RFP for new High Care Area at AT&R closes on 7 Jun 2018. Estimate one month to review submissions and provide evaluation report for appointment. Currently six weeks head of programme.
- **Decision making frame work:** Workshops have been completed. Planning and Funding to complete final report.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** The Feasibility study is now complete and work is to commence shortly on repurposing the old Burwood Administration building to accommodate community teams.
- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in Sep 2017. The next step is the development of Detailed Business Case which is planned for July 2018 for submission.

Ashburton Hospital & Rural Campus

- Stage 1 and 2 works are complete. Final claims have been agreed with the contractor. Final defects resolution and retention release expected to be resolved in next two months. Meeting mid-June to discuss.
- **Tuarangi Plant Room**: Concept drawing completed and safety consultant report received. Now looking to hand over to M&E to implement.

- **New Boiler and Boiler House**: Project process commenced. This is currently being managed by M&E.

Other Sites/Work

- **Decision Making Frame Work:** This work is now being led by Planning and Funding. SRU will continue to be heavily involved to ensure a streamlined process is achieved. Workshops have been completed and final report is currently being compiled.
- **Akaroa Health Hub:** Retaining walls and major earthworks are nearing completion. Building foundations to begin this month.
- **Kaikoura Integrated Family Health Centre:** Scoping of cosmetic damage due to November's earthquake is complete. Estimates provided to Corporate Finance. Driveway repair completed. Sound proofing underway. Beca working on repair strategy.
- **Rangiora Health Hub:** Value engineering has shown some area for cost saving. Minor work to the design of some elements taking place to realise possible savings. Main contractor ROI closed. Availability of Hagley Outpatients building has been set as 12 Nov 2018.
- **Home Dialysis:** Business case approved by Board. Detailed design commencing. Programme forecast completion in Feb 2019.
- **SRU:** Project Management Office manuals re-write and systems overview. Approximately 60% complete. Aligning with P3M3 process and documentation where appropriate.
- **Seismic Monitoring:** Business Case approved.
- **HREF:** SRU continues to be involved in providing construction and contract administration / interpretation advice to the HREF project. Completion expected in early June.
- **Annual Damage reviews:** Reviews have been completed on site. Some reports have been received, but not yet reviewed by SRU.

Project/Programme Key Issues

- The recent notification of Fletcher Construction closing down their building and interiors division will have effects on current work programmes and pricing. SRDU continue to review outstanding work faces and projects to identify the risks and issues for delivery of these projects. Meetings held with Fletchers senior management.
- The lack of a detailed Master Plan for the Hillmorton campus is still affecting our ability to provide a comprehensive EQ decision making assessment. We continue to use the framework adopting a more granular approach to determine outcomes.
- Additional peer reviews of Parkside and Riverside structural assessments, being undertaken by the MoH, are now complete. Clarity on the direction of the Master Planning process is required to plan the next stage of the POW.
- Delays to the POW continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. The urgent works undertaken to facilitate the MoH run link corridor works has further affected this. Restricted access has been given to one area.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.

- Passive fire issues are now being raised in the labs building. Work completed and in final review. Potential passive fire issues around comm floor 80 and use of all proof collars at outpatients, ASB and Burwood are currently under review and proposed solutions have been provided. We will work with contractors, designers and the MoH to ensure we get the appropriate systems installed.
- Uncertainty of delivery of MoH projects continues to affect our ability to programme projects and allocate resources efficiently.
- Impact of changes to the Building Act and Seismic assessment methodology continue to be assessed in relation to DHB buildings. Some buildings will be assessed at a higher % NBS than previously, but it is likely that more building will be deemed to be EQ prone than is currently the case. There are significant cost implications arising from these changes as strengthening schemes are likely to cost more and existing engineering reports are no longer valid as a basis for consentable strengthening work. SRDU have started work on assessing these items.
- Reconciliation of earthquake prone buildings with CCC has been completed.

4. APPENDICES

Appendix 1: Project Status Reports

Report prepared by: Brad Cabell, Programme Director - Construction & Property

Report approved for release: Mary Gordon, EMT Lead Facilities & Executive Director of Nursing

FACILITIES UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members Facilities Committee**

SOURCE: **Site Redevelopment**

DATE: **23 July 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper is a standard agenda item to the Facilities Committee providing an overview of progress with approved projects. A more detailed paper is provided to the Committee quarterly, which also goes to the Hospital Redevelopment Partnership Group (*HRPG*), as well as Canterbury DHB's Board and Quality, Finance, Audit and Risk Committee.

2. RECOMMENDATION

That the Committee:

i. notes the Facilities Update report.

3. DISCUSSION

Approved projects are progressing as planned with the main updates since the previous report as outlined below

General Earthquake repairs within Christchurch Campus

- **Parkside Panels:** Detailed planning is continuing for disconnecting the Chemo Day Ward for Parkside. Pricing negotiations are ongoing with the ASB link main contractor.
- **Clinical Service Block roof strengthening above Nuclear Medicine:** Current delivery dates for the equipment are forecast for 1 September 2018. The equipment will be stored at Print Place. Design consultants are reviewing detailed user requirements. Engineering has brought the design within budget and has CLG approval. Design Team working towards consent / tender documents issue early August.
- **Lab Stair 3:** Complete.
- **Lab Stair 4:** Initial / scoping work has begun.

Christchurch Women's Hospital

- **Stair 2:** Awaiting review from fire engineer to enable planning as part of the overall Women's Risk analysis. This continues to be delayed due to the release of the master plan which is required to determine available space for decanting of clinical spaces.
- **Level 4:** Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels, but will endeavour to pick this up during Women's Passive Fire works.
- **Level 5:** Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time, but will endeavour to pick this up during Women's Passive Fire works.
- **Level 3:** All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering**
  - Database designs complete and in use by Site Redevelopment on current passive work. Currently developing brief for digitalization of the passive fire system and database and within the digitalization programme the forms and documents will be updated to e-forms. Awaiting M&E senior management to approve / comment on draft policies.
  - Test rig complete and installer testing has commenced. RFP for materials complete, primary and secondary suppliers in final contract preparation stage.
  - Continue to identify more non-compliant areas as other projects open walls/ ceilings.
- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*).
  - Service Tunnel: Complete. Steam provided by coal boilers to Outpatients and Hospital. Final connection for ASB still to be completed.
  - Energy Centre: ROI for boilers completed.
- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until new energy centre commissioned.
- **Parkside renovation project to accommodate clinical services, post ASB (managed by MoH):** Planning ongoing. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. Draft master plans have been provided for review. The SRDU team are having regular meetings with the MoH project managers (Projex) to assist in their information gaps.
- **Back up VIE tank:** Initial proposed strengthening scheme has been approved by BOC. Quantity Surveyor pricing proposed strengthening scheme. Work cannot commence until primary VIE tank becomes operational. This is currently affected by the Antigua Street exit widening works.
- **Antigua St Exit widening:** Work commenced on site 29 May 2018. Due completion end July 2018.
- **New Outpatient project (managed by MoH**): Architectural / services fit out on all floors well underway. Completion programme issued. Certificate of Public Use (*CPU*) sometime in August. Practical completion planned for 27 September 2018.
- **Avon Generator Switch Gear and Transformer Relocation:** Design work underway. Due to the small size and engineering component this is now being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro programme slipped – Antigua St open. Oxford Gap closed 7 April to December 2018. Land swap discussion still with LINZ.
- **Parkside Canopies:** Temporary repairs to plastic wrap have been made. Planning underway to replace the wrap at the main entry.
- **Hagley Outpatients 2 Storey demolition:** Business case completed awaiting approval in early July.
- **New Outpatients Cafeteria:** Detail design completed. Business case approved. Contract negotiation with Leighs' construction underway and subject to QS review and approval of pricing. Aiming for completion of café on or before occupation.
- **Diabetes Demolition:** Demolition tender to be issued in August with a view to obtaining a demolition cost for business case. Demolition to occur after home dialysis relocates to refurbished leased facility.

Burwood Hospital Campus

- **Burwood New Build**: Defects continue to be addressed as they come to hand.
- **Burwood Admin old main entrance block:** Feasibility study complete and work to commence on repurposing building to accommodate community teams for TPMH. Project management resource available to start 4 July 2018.
- **Burwood Mini Health Precinct:** User groups have been engaged with to identify space needs and expectations. Project delivery options, funding options and lease agreements are currently being discussed and need to be resolved before the project can proceed any further.
- **Spinal Unit:** Ward HG (Spinal unit) has decanted into ward FG. Tenders have been evaluated and work will start shortly after clearing final contract tags.
- **Burwood Birthing/Brain Injury Demolition**: Demolition work commenced 2 July 2018. The demolition programme continues to show work being completed in December 2018.
- **Burwood Tunnel Repairs:** Work is now complete.
- **2nd MRI Installation:** Work commenced on site on 2 July 2018 to construct the Faraday cage.
- **Decision making frame work**: Workshops completed. Final report submitted to the Board for consideration.

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building:** Previously completed strengthening schemes have been reviewed and concept cost estimates updated. Recommendation to strengthen to 67% IL2.
- **Cotter Trust:** On-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Review of all Forensic services including PSAID, AT&R, Roko being completed, including refurbishment verses rebuild cost and logistic process. Awaiting results of clinical review. RFP for consultants on the new High Care Area at AT&R has closed. Reviews completed. Estimated start of design process will be 13 July 2018.
- **Decision making frame work**: Workshops completed. Final report submitted to the Board for consideration.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** The Feasibility study is now complete and work is to commence shortly on repurposing the old Burwood Administration building to accommodate community teams.
- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in September 2017. The next step is the development of Detailed Business Case which is planned for July 2018 for submission.

Ashburton Hospital & Rural Campus

- Stage 1 and 2 works are complete. Final claims have been agreed with the contractor. Final defects resolution and retention release expected to be resolved in next two months.
- **Tuarangi Plant Room**: Concept drawing completed and safety consultant report received. Now looking to hand over to M&E to implement.

- **New Boiler and Boiler House**: Project process commenced. This is currently being managed by M&E.

Other Sites/Work

- **Decision Making Frame Work:** This work is now being led by Planning and Funding. SRU will continue to be heavily involved to ensure a streamlined process is achieved. Workshops have been completed and final report has been presented for Board approval.
- **Akaroa Health Hub:** Retaining walls and major earthworks practically complete. Building foundations in the early stages. Poor weather in May and June has affected site progress. Delays are being monitored and completion dates may need to be adjusted.
- **Kaikoura Integrated Family Health Centre:** Scoping of cosmetic damage due to November's earthquake is complete. Estimates provided to Corporate Finance. Driveway repair completed. Trial sound proofing complete. Beca working on repair strategy for damage to floor and supporting structure after which pricing and operational impacts to be assessed.
- **Rangiora Health Hub:** Main contractor RFP to go onto GETS on 12 July 2018 Availability of Hagley Outpatients building has been set as 12 November 2018.
- **Home Dialysis:** Business case approved by Board. Tender documents due out mid July. Programme forecast completion in February 2019.
- **SRU:** Project Management Office manuals re-write and systems overview. Approximately 70% complete. Aligning with P3M3 process and documentation where appropriate.
- **Seismic Monitoring:** Business Case approved.
- **HREF:** SRU continues to be involved in providing construction and contract administration / interpretation advice to the HREF project. Building has been blessed and is partially occupied.
- **Annual Damage reviews:** Reports have now been completed.

Project Programme Key Issues

- The recent notification of Fletcher Construction closing down their building and interiors division will have effects on current work programmes and pricing. SRDU continue to review outstanding work faces and projects to identify the risks and issues for delivery of these projects. Meetings held with Fletchers senior management.
- The lack of a detailed Master Plan for the Hillmorton campus is still affecting our ability to provide a comprehensive EQ decision making assessment. We continue to use the framework adopting a more granular approach to determine outcomes.
- Additional peer reviews of Parkside and Riverside structural assessments, being undertaken by the MoH, are now complete. Clarity on the direction of the Master Planning process is required to plan the next stage of the POW.
- Delays to the POW continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. The urgent works undertaken to facilitate the MoH run link corridor works has further affected this. Restricted access has been given to one area.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.

- Passive fire issues are now being raised in the labs building. Work completed and in final review. Potential passive fire issues around comm floor 80 and use of all proof collars at outpatients, ASB and Burwood are currently under review and proposed solutions have been provided. We will work with contractors, designers and the MoH to ensure we get the appropriate systems installed.
- Impact of changes to the Building Act and Seismic assessment methodology continue to be assessed in relation to DHB buildings. Some buildings will be assessed at a higher % NBS than previously, but it is likely that more building will be deemed to be EQ prone than is currently the case. There are significant cost implications arising from these changes as strengthening schemes are likely to cost more and existing engineering reports are no longer valid as a basis for consentable strengthening work. SRDU have started work on assessing these items.

4. APPENDICES

Appendix 1: Project Status Reports

Report prepared by: Brad Cabell, Programme Director - Construction & Property

Report approved for release: Mary Gordon, EMT Lead Facilities / Executive Director of Nursing

QUARTERLY FACILITIES/EARTHQUAKE POW UPDATE

Canterbury District Health Board
Te Poari Hauora ō Waitaha

TO: **Chair and Members Facilities Committee**

SOURCE: **Site Redevelopment**

DATE: **14 August 2018**

Report Status – For:	Decision ☐	Noting ☑	Information ☐

1. ORIGIN OF THE REPORT

This paper is provided to the Committee on a quarterly basis, providing a more detailed update on the Earthquake/Facilities Programme of Works (*POW*). This paper is also provided to the CDHB Board and Quality, Finance, Audit and Risk Committee (*QFARC*) for information, as well as being provided to the Hospital Redevelopment Partnership Group (*HRPG*).

2. RECOMMENDATION

That the Committee:

i. notes:
- the quarterly Programme of Works (*POW*) report as at July 2018, is outlined in Appendix 1 and that this report has four sections (as requested by the Committee):
  - yet to be approved projects;
  - approved work-in-progress projects;
  - completed projects; and
  - excluded/deferred projects;
- the Facilities update summary by campus, as provided in Appendix2;
- the detailed project status reports for major projects that are underway, including the Site Safety Review Reports, as provided in Appendix 3;

ii. notes the major changes are:
- Item "R1a - ChCh Energy Centre" – Proposal on revised boiler configuration to 2x7.5MW boilers has been recommended by the Facilities Committee to the 16 August 2018 Board meeting;
- Item "R2 - ChCh Hospital Campus Master Plan" – At the 22 June 2018 HRPG meeting: In order for CIC to include this project in their prioritisation process they have requested external independent verification of capacity numbers for comparison with other capacity increasing projects. Next steps include restructuring the business case and selecting reviewers;
- Item "R2a – ChCh Hospital Campus Master Plan Parkside External Panels Restraint" - Total of $1.2m has been approved by the Board at its May 2017 meeting, for the NW corner of Parkside external concrete panels, to be funded from PoW Item R2 "Christchurch Hospital Campus Master Plan" budget;
- Item "C26a – Demolition of the 2 Storey Hagley Outpatient Temporary Building" – Is a new item approved in July 2018 by CDHB management to demolish the 2 storey portion. The single storey portion is relocating to Rangiora to complete the Rangiora Health Hub, however, no appropriate or economical option can be found for the 2 storey Hagley Outpatient portion;

- Item "B36 – Burwood Birthing Unit (previously called Ward 7 & 8)" – Total of $1.663m to complete the demolition has been approved by the Board at the 21 June 2018 meeting;

iii. notes that the indicative funding gap within the PoW budget is still about $21.8m (no change from the last quarterly report); and

iv. notes the indicative cashflow plan for approved projects managed by Site Redevelopment; as outlined in Appendix 4.

3. SUMMARY

	Re-Prioritised Budget (April 2018)	Re-Prioritised Budget (July 2018)
Subtotal for Priority Ringfenced Projects	[redacted]	
Christchurch Campus - Subtotal		
Burwood Campus - Subtotal		
Hillmorton Campus - Subtotal		
TPMH Campus - Subtotal		
Ashburton Campus - Subtotal		
Other Sites Campus - Subtotal		
Total Requirements		
Indicative Funding Shortfall		
POW Total Budget		

4. APPENDICES

Appendix 1: Quarterly Programme of Works Summary
Appendix 2: Facilities Update Summary by Campus
Appendix 3: Project Status Reports & Safety Reports
Appendix 4: Site Redevelopment Managed Projects Cashflow

Report prepared by: Brad Cabell, Programme Director - Construction & Property
Beng-Cheng Chan – Corporate Support

Report approved for release: Mary Gordon, EDON and EMT Lead for Facilities

FACILITIES UPDATE SUMMARY BY CAMPUS

Canterbury District Health Board
Te Poari Hauora ō Waitaha

SUMMARY – FACILITIES UPDATE

Approved projects are progressing as planned with the main updates since the previous report as outlined below.

General EQ Repairs within Christchurch Campus

- **Parkside Panels:** Detailed planning is continuing for disconnecting the Chemo Day Ward for Parkside. Pricing negotiations are ongoing with the ASB link main contractor, which has been engaged under an early contractor involvement agreement to progress the temporary works design.
- **Clinical Service Block Roof Strengthening Above Nuclear Medicine:** Current delivery dates for the equipment are forecast for 1 September 2018. The equipment will be stored at Print Place. Design consultants are reviewing detailed user requirements. Value Engineering has brought the design within budget and has CLG (Clinical Leaders Group) approval. Design Team working towards consent / tender documents issue early August.
- **Lab Stair 3:** Complete.
- **Lab Stair 4:** Initial / scoping work complete. Preliminary design commenced.

Christchurch Women's Hospital

- **Stair 2:** Draft review completed by fire engineer as part of the overall Women's risk analysis. Balance of analysis to be completed once process has been agreed by EMT and the Board. This continues to be delayed due to the release of the master plan which is required to determine available space for decanting of clinical spaces.
- **Level 4:** Crack injection around core to be undertaken. Parent room, kitchen and toilet areas complete. Difficulties gaining access to area due to patient levels, actively working with staff to look at options to commence the remedial and Passive Fire works.
- **Level 5:** Small amount of work to corridor unable to commence due to operational constraints (NICU). Working with teams to identify a suitable time, but will endeavour to pick this up during Women's Passive Fire works.
- **Level 3:** All areas complete except reception, which is to be done at same time as stair strengthening to minimise disruption.

Other Christchurch Campus Works

- **Passive Fire/Main Campus Fire Engineering:**
  - Database designs complete and in use by Site Redevelopment on current passive work. Currently developing brief for digitalization of the passive fire system and database and within the digitalization programme the forms and documents will be updated to e-forms. Awaiting M&E and SRU senior management to approve / comment on draft policies.
  - Test rig complete and installer testing has commenced. RFP for materials complete, primary and secondary suppliers contract signed.
  - Continue to identify more non-compliant areas as other projects open walls / ceilings.
  - Second Stage RFP for installer fixed costs is currently being prepared for review and approval.
- **Christchurch Hospital Campus Energy Centre**: This is managed by the Ministry of Health (*MoH*):

- Service Tunnel: Complete. Steam provided by coal boilers to Outpatients and Hospital. Final connection for ASB still to be completed.
- Energy Centre: ROI for boilers completed.

- **235 Antigua St and Boiler House (Demolition).** No work to be undertaken until new energy centre constructed and commissioned.
- **Temporary Accommodations on Antigua/Tuam St.** Business case approved. Awaiting resource consent document completion, for lodgement in one weeks' time. All items have been costed.
- **Parkside Renovation Project to Accommodate Clinical Services, Post ASB (managed by MoH):** Planning ongoing. This project is being managed by the MoH with close stakeholder involvement from the CDHB. Still waiting on advice from MoH as to outcome of master planning process. Draft master plans have been provided for review.
- **Back Up VIE Tank:** Initial proposed strengthening scheme has been approval by BOC. Quantity Surveyor currently pricing proposed strengthening scheme to inform the business case. Primary VIE tank is operational.
- **Antigua St Exit Widening:** Minor works remain for completion. These include line marking and signage. CDHB work completed in advance of Otakaro requirements.
- **New Outpatient Project (managed by MoH**): Architectural / services fit out on all floors well underway. Completion programme issued. Certificate of Public Use (*CPU*) sometime in August. Practical completion currently planned for 27 Sept 2018.
- **Avon Switch Gear and Transformer Relocation**. Design complete. Business case to be submitted for approval. Project is being managed by M&E.
- **Otakaro/CCC Coordination.** Otakaro programme slipped – Antigua St open. Oxford Gap closed 7 April to December 2018. Land swap discussion still with LINZ. Regular Wednesday meetings are occurring.
- **Parkside Canopies:** Temporary repairs to plastic wrap have been made. Planning underway to replace the wrap at the main entry once the Oxford Terrace access reopens.
- **Hagley Outpatients 2 Storey Demolition:** Business case approved. Negotiations commenced with demolition contractor.
- **New Outpatients Cafeteria:** Detail design completed. Business case approved. Contract negotiation with Leighs construction underway and subject to QS review and approval of pricing.
- **Diabetes Demolition**: Demolition to occur after Home Dialysis Training Centre has relocated to refurbished leased facility. Request for tender issued 16 July 2018 with a closing date of 24 August 2018. Four contractors have been selected following the registration of interest process. Following the tender, the costing will inform a revised business case.

Burwood Hospital Campus

- **Burwood New Build**: Defects are being addressed as they come to hand.
- **Burwood Admin Old Main Entrance Block:** Meeting to be organized with community team leadership group to assess requirements and then formalise repair design process. This will enable the repurposing of the building to accommodate community teams from TPMH.
- **Burwood Mini Health Precinct:** User groups have been engaged with to identify space needs and expectations. Project delivery options, funding options and lease agreements are currently being discussed and need to be resolved before the project can proceed any further.

- **Spinal Unit:** Construction main contract awarded to HRS Ltd. Work commenced on site 16 July 2018. The Spinal Ward (HG) has decanted into ward FG to enable construction process.
- **Burwood Birthing/Brain Injury Demolition**: Demolition work commenced 2 July 2018. No incidents to date.
- **Burwood Tunnel Repairs:** Work is now complete in all accessible areas.
- **2nd MRI Installation:** Work to faraday cage continues. MRI programmed to be on site 13 August 2018.

Hillmorton Hospital Campus

- **Earthquake Works:** No earthquake works currently taking place. This will be reviewed once the outcome of the TPMH mental health business case has been advised.
- **Food Services Building:** A high level building assessment has highlighted potential issues with the roof and the switchboard. This work is to be considered as part of structural upgrade and may form part of the proposed works.
- **Cotter Trust:** On-going occupation being resolved as part of overall site plan requirements.
- **Mental Health Services:** Consultants engagement on the new High Care Area at AT&R nearing completion. Preliminary design to commence shortly subject to final contract agreements and tags being cleared with consultants.

The Princess Margaret Hospital Campus

- **Older Persons Health (*OPH*) Community Team Relocation:** The feasibility study is now complete and work is to commence shortly on the options for repurposing the old Burwood Administration building to accommodate community teams.
- **Mental Health Services Relocation:** Indicative Business case approved by Ministers in September 2017. The Detailed Business Case is awaiting Ministry of Health and Capital Investment Committee approval.

Ashburton Hospital & Rural Campus

- **Stage 1 and 2 Works are Complete.** Final claims have been agreed with the contractor. Final defects resolution and retention release is protracted and expected to require several more months to resolve.
- **Tuarangi Plant Room**: Concept drawing completed and safety consultant report received. Now looking to hand over to M&E to implement.
- **New Boiler and Boiler House**: Approval has been granted to proceed to consultants procurement. Pending outcome of the tender process. This is currently being managed by M&E.

Other Sites/Work

- **Akaroa Health Hub:** Foundation and slab setout complete. In slab services are being installed. Programme is still running behind due to adverse weather.
- **Kaikoura Integrated Family Health Centre:** Repair strategy received from Beca. SRU to meet with local Project Manager to discuss extent of repairs, confirm scope and resubmit pricing based on revised scope.
- **Rangiora Health Hub:** Main contractor RFP released on GETS 17 July 2018. Availability of Hagley Outpatients building has been set as 12 November 2018.
- **Home Dialysis Relocation:** Business case approved by Board. Tender documents due out late July. Programme forecast completion February 2019.

- **SRU:** Project Management Office manuals re-write and systems overview. Approximately 75% complete. Aligning with P3M3 process and documentation where appropriate.
- **Seismic Monitoring:** At the June 2017 Board meeting, approval has been granted to proceed to procurement to better understand the capital required. The outcome of this will form part of the business case for Board approval.
- **HREF:** SRU continues to be involved in providing construction and contract administration / interpretation advice to the HREF project. Building has been blessed and is partially occupied.
- **Annual Damage Reviews:** Reports have now been completed.

Project/Programme Key Issues

- The lack of a detailed Master Plan for the Hillmorton campus is still affecting our ability to provide a comprehensive EQ decision making assessment. We continue to use the framework adopting a more granular approach to determine outcomes.
- Additional peer reviews of Parkside and Riverside structural assessments, being undertaken by the MoH, are now complete. Clarity on the direction of the Master Planning process is required to plan the next stage of the POW.
- Delays to the POW continue to add risk outside the current agreed Board time frames. Key high risk areas of Panel replacement are starting, as instructed by the Facilities Committee and CDHB Board.
- Access to NICU to undertake EQ repairs to floors continues to be pushed out due to access constraints. SRDU is looking at options to decant teams to adjacent spaces to allow works to commence. This will, however, not be possible until the ASB project is complete and space in Parkside becomes available.
- Passive fire wall repairs continue to be identified. Repairs to these items are being completed before the areas are being closed up, but the budget for this has not been formalised. On-going repairs of these items, while essential, continue to put pressure on limited budgets and completion time frames.
- Potential passive fire issues around Comm floor 80 and use of all proof collars at outpatients, ASB and Burwood are currently under review and proposed solutions have been provided. We will work with contractors, designers and the MoH to ensure we get the appropriate systems installed.
- Uncertainty of delivery of MoH projects continues to affect our ability to programme projects and allocate resources efficiently.
- Impact of changes to the Building Act and Seismic assessment methodology continue to be assessed in relation to DHB buildings. Some buildings will be assessed at a higher % NBS than previously, but it is likely that more buildings will be deemed to be EQ prone than is currently the case. There are significant cost implications arising from these changes as strengthening schemes are likely to cost more and existing engineering reports are no longer valid as a basis for consentable strengthening work. The programme of works and business as usual projects are currently being reviewed in conjunction with the approved revised decision making framework in an attempt to identify tranches of work for commencement. This process is still largely dependent on master planning. Guidance from the Board will be required as to the timing and suitability of any proposed projects to mitigate ongoing risks to the CDHB.

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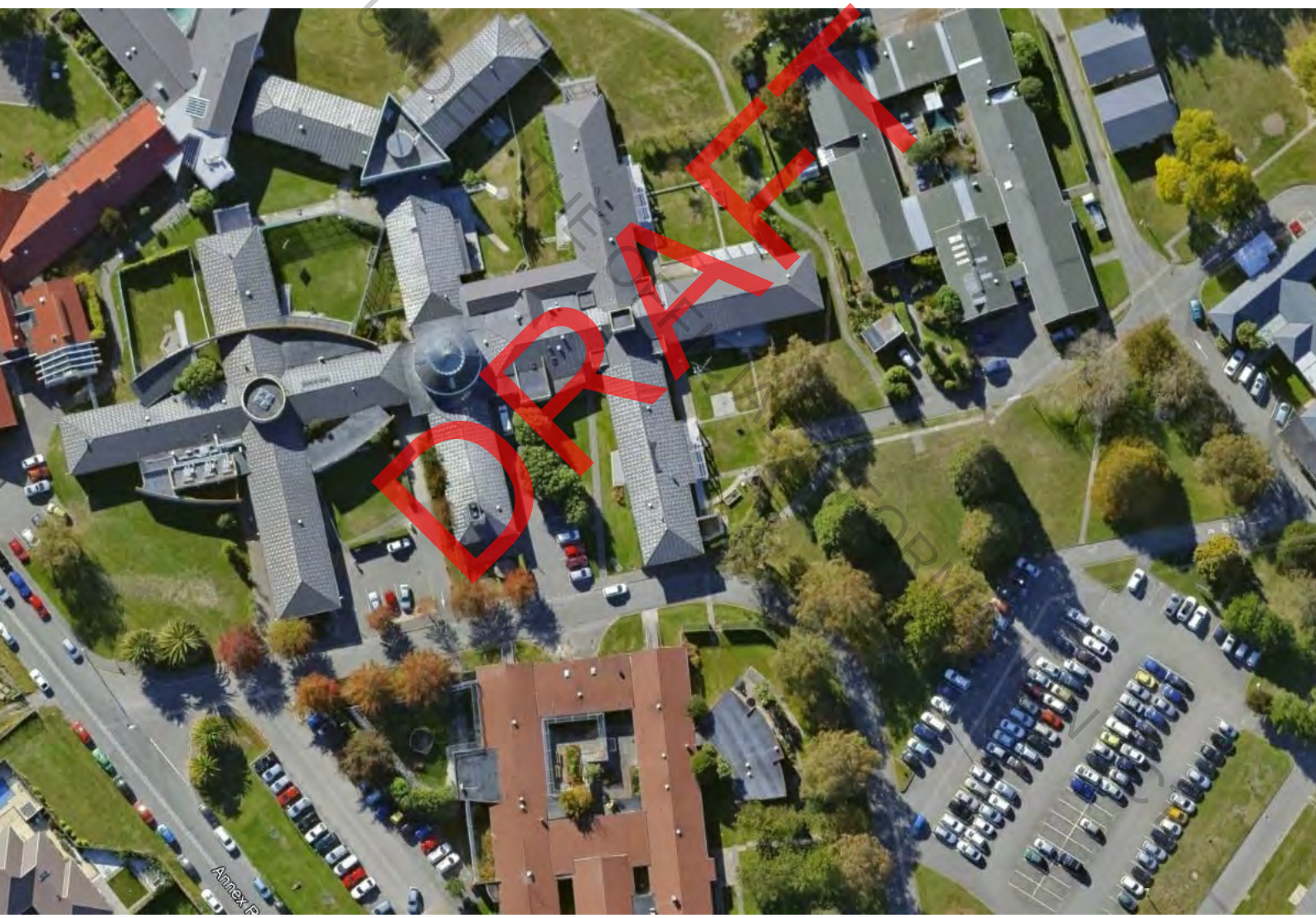
Canterbury
District Health Board
Te Poari Hauora ō Waitaha

Hillmorton Hospital

Condition Assessment of Hospital Buildings



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Contents

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Revision	Date	Author	Reviewed by	Approved by	Status
1	11/07/2018	N Dawe	A Van Meer	A Van Meer	Draft

Revision Details

Revision	Details

Executive Summary

This report presents the results of an asset condition survey carried out at Hillmorton Hospital in 2018. The survey focussed upon the building's exterior fabric, the primary mechanical systems and the main electrical distribution for buildings 1 through 10, 13, 15, 16, 21, 22, 23 and 31. The survey excluded interior finishes, site services grounds and landscaping. This survey report also includes a structural overview of the buildings for potential snow load issues.

The conditions found varied significantly primarily due to the differing age of the buildings. There was significant evidence of a large backlog of deferred maintenance with a number of building elements being at or even beyond the point where intervention would be required to extend their working life.

The primary areas where major deferred maintenance was noted included roofs, windows (steel and timber) and guttering/spouting systems.

The roofs were inspected by aerial drone which uncovered evidence of vandalism and abandoned/redundant materials left on roofs that would not have been seen from any ground based survey.

Due to the age of many of the buildings suspected asbestos containing materials were found in a number of building elements.

The structural review indicates that there are a number of buildings on site where potential high snow loads may pose a health and safety hazard, cause roof collapse and therefore potentially create major business interruptions.

The overall condition of all the assets surveyed is 2.8 out of 5. This includes external elevations, roofs and M&E plant.

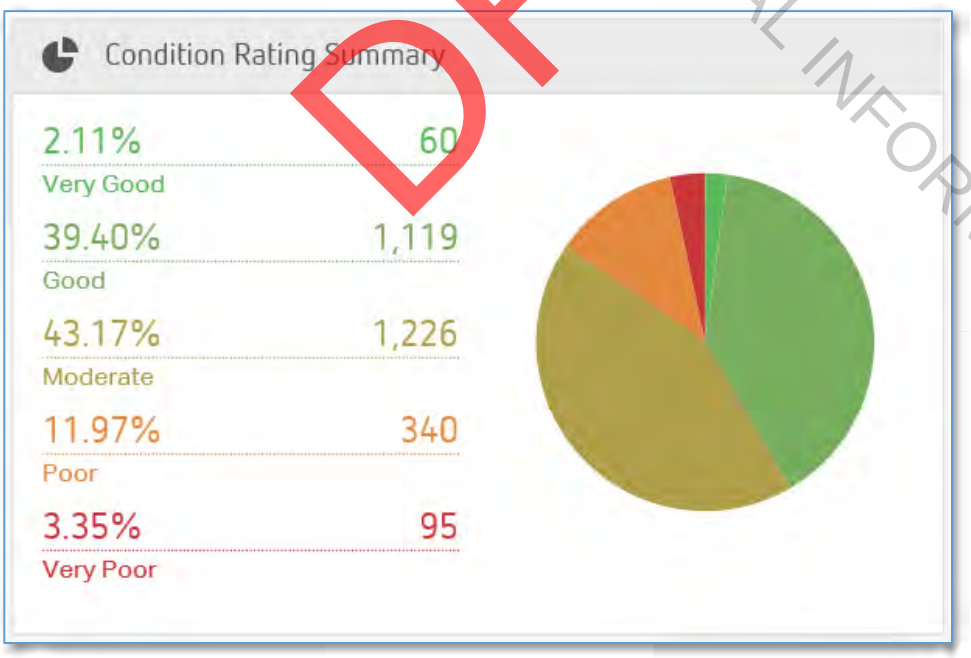

Figure 1 *Overall site Condition Summary*

1 Introduction

1.1 Background and Scope

In 2018, the Canterbury District Health Board (CDHB) engaged WSP-Opus to undertake a survey of building exterior surfaces and plant rooms at Hillmorton Hospital to review or update existing asset inventories, and carry out condition assessments for various buildings. The results are presented in a form that will enable the development of asset forward renewal and maintenance programmes that help to underpin financial programmes for Long Term Planning.

The scope focussed on the following key asset components of buildings 1 to 10, 13, 15, 16, 21, 22, 23 and 31;

- Collect data for the materials as per the list provided by WSP-Opus (appendix 1 or our Offer of Service).
- Confirm material, finish and quantity with condition assessed on a scale of 1 to 5 as per IIMM manual.
- Attach photographs of wall surfaces to file record.
- Record any deferred maintenance item with brief description and photos.
- Visit all plant rooms on site and complete and update the data records for all mechanical and electrical equipment to match existing Maximo standard.
- Provide portal to allow CDHB staff to view data on line in the ADT (Asset Data Toolset).
- Utilise a UAV (unmanned aerial vehicle or 'drone') to provide condition information on the roof coverings and roof drainage systems.
- Present all data in an excel format to match the CDHB fields provided, for automatic input into the Maximo database.

1.2 Exclusions

The report excludes any review of:

- Interior finishes,
- Site services,
- Grounds,
- Landscaping
- Building services beyond main plant rooms and electrical distribution

We were unable to assess if damage has been caused or the presence of mould due to any water ingress issues.

1.3 Methodology

A team of experienced building surveyors and engineering professionals assessed the condition grade of all assets, utilising our ADT system to facilitate data capture.

(a) Data Collection Tools

WSP-Opus used the latest data capture technology ensuring that collected data contains the correct level of meta-data to feed into the risk based prioritisation and programme processes.

Electronic hand held devices and Unmanned Aerial Vehicles (UAV) technologies were utilised for the survey work.

Data is held in WSP-Opus' secure cloud based asset data tool, where it can be accessed by the CDHB through web browsers (such as Google Chrome). This data

includes photographs, inventory data, condition data and details of any defects or hazards noted during the survey.

(b) Data Collection & Building Vertical Face Condition Assessment (Exterior Elevations)

Site visits were undertaken by experienced building surveyors to confirm site layout, risks and dimensions.

The data set includes the location, material of construction, dimensions, area quantities and approximate age of each building vertical face.

The surveys included cladding, windows, doors, soffits, facias, stairs, decks, ramps, guttering and spouting

(c) Roof Condition Assessment

WSP-Opus utilised UAV to provide condition information on the roof coverings and roof drainage systems for each building.

The UAV scope of work included a UAV survey of the various buildings, capturing aerial video data in 4K. Still photos of any areas of interest were then captured from individual frames of the video.

(d) Mechanical and Electrical

WSP-Opus have performed a Mechanical and Electrical Survey of the Energy Centre and each Plantroom, including all plant and main switch boards and distribution boards. The information has been collected using the ADT and has been exported in the format outlined in the CDHB document M07 Asset Data for import to Maximo (.docx) and M07A Info for Asset Table 2016 (.xlsx).

(e) Structural

The buildings have all being previously seismically assessed and no comment is made here. WSP-Opus has however, reviewed the potential snow loading risks for the buildings.

2 Property

2.1 Related Information

This report can be read alongside the inventory spread sheets for each building and the photos which can be found within the Opus ADT application, some of which are also included in the Appendices. Additionally, the UAV videos of the roof are available and can be used to gain a broader understanding of the condition of the roof surfaces.

The survey includes 2765 separate assessments and 2833 photos.

The overall average condition of all the assets surveyed is 2.8 out of 5.

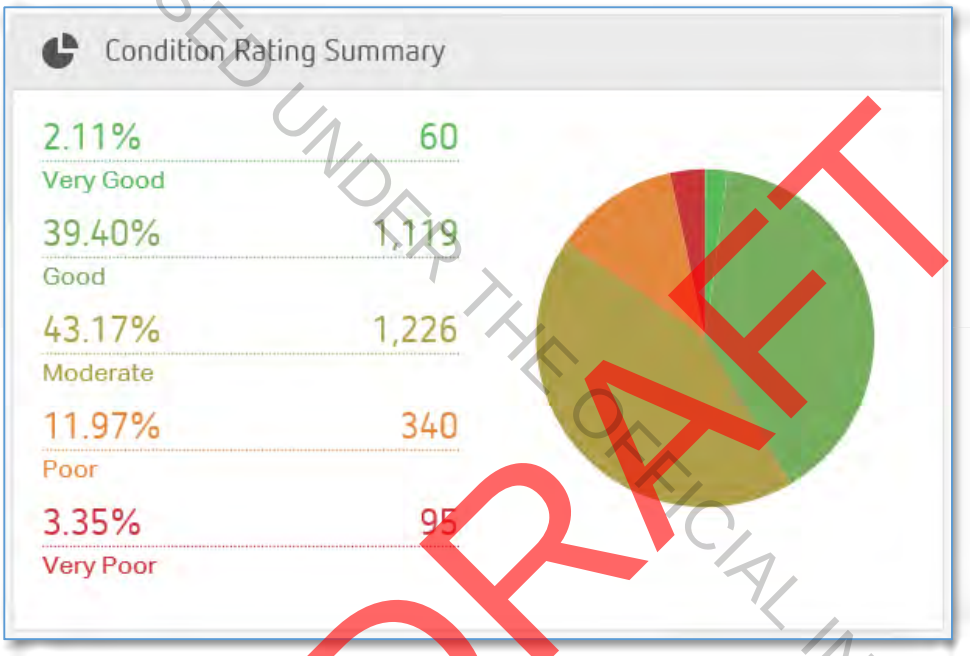

Figure 2 *Overall site Condition Summary*

The life expectancy, installation date and condition are all used to estimate a replacement year for individual elements.

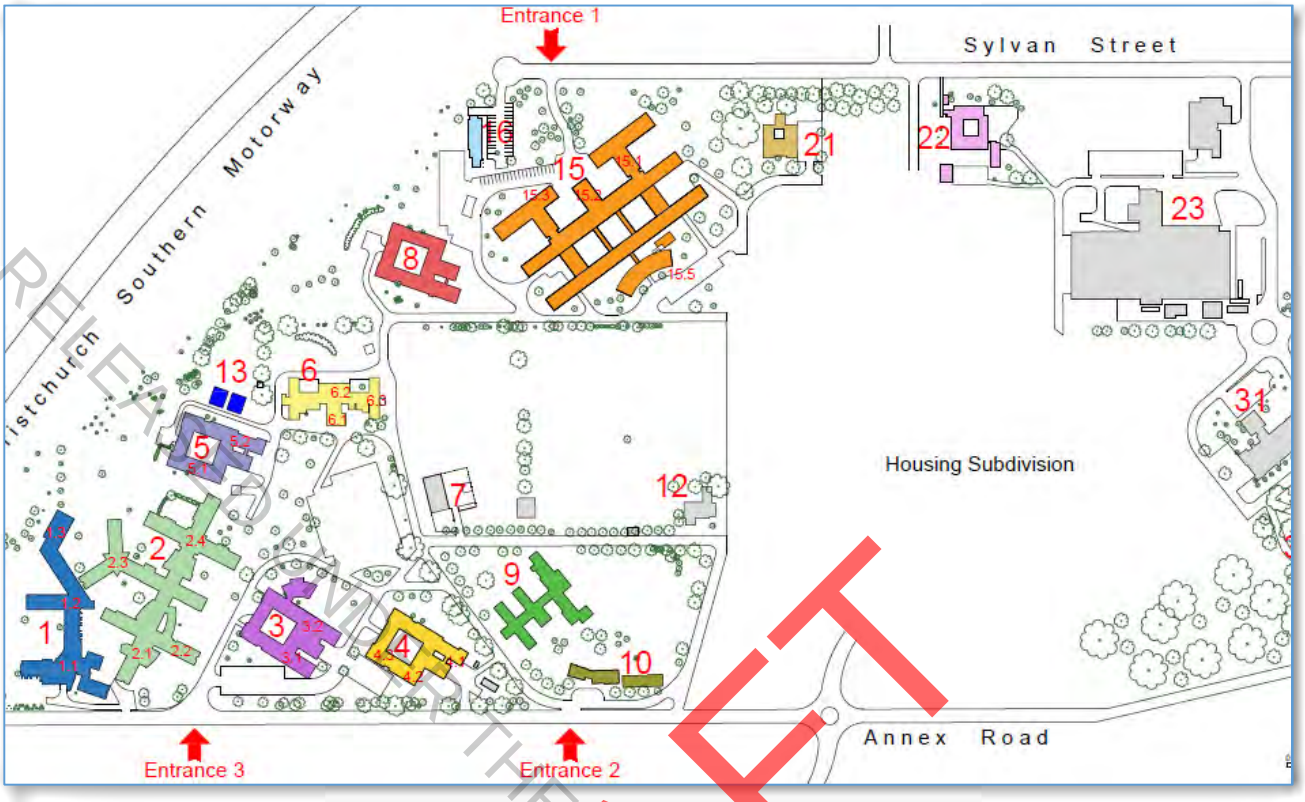

Figure 3 *Site Plan Showing locations of Buildings Surveyed.*

3 Structural Commentary

3.1 General

Following the Canterbury earthquakes the Canterbury District Health Board (CDHB) engaged structural engineering firms to undertake rigorous inspections of the buildings at Hillmorton Hospital. The various Detailed Engineering Evaluations (DEE), Detailed Structural Analysis (DSA), and level surveys generated during this process were focussed primarily on seismic activity, and were forwarded to WSP-Opus to aid our understanding of the buildings prior to our inspection.

Given the level of rigour already applied to seismic activity, the primary focus of our inspection was to identify and comment on deterioration and longevity of key building elements, and to comment on vulnerability to non-seismic loads.

A structural focused site visit was completed on the 2nd and 3rd May. The site visit involved a brief walk around the buildings to gain an understanding of the structural systems. Some of the buildings were observed to be highly vulnerable to snow loadings, which is particularly important for asset management. Our commentary therefore focusses on this risk factor.

3.2 Code Issues

Following a NIWA report commissioned by The Department of Building and Housing (now MBIE), the New Zealand Building Code changed the basic snow load in Canterbury from 0.6kPa to 0.9kPa in 2010 (see section 3.4 for further detail). Therefore in buildings designed prior to 2010, large roof spans, flat or near flat roofs, flat roofs adjacent to steep roofs and other areas where snow can collect may not be able to cope with expected snow loads. The structure, being overloaded from snow can result in high deflections and compromise the building envelope. Overtime, the deflection can be excessive and cause ponding. These high snow loads may pose a life hazard due to roof collapse, and potentially cause major business interruptions.

3.3 Site Findings

During our site visit, we found there were multiple roof areas that could be substandard for snow loads, as shown in Figure 4. Of these buildings, we are particularly concerned about the roof in the laundry building (Figure 5) and the canopy structure in the pre-school, due to the large spans and relatively flat roofs. The canopy structure in the pre-school is likely to be unconsented and the large spans were observed to be significantly under designed. The buildings of concern include:

Part of Building 2
Building 3
Building 4
Building 5
Part of Building 6
Building 8
Part of Building 9
Part of Building 10
Front part of Building 15
Building 21
Building 23

Figure 4 *Plan of roof locations that require further assessment for snow loads*

Figure 5 *Large flat roof area identified in the Laundry Services Building*

3.4 Supporting Information

Analysis of NIWA's historic weather events database shows that a total of 39 snowstorms have damaged property and infrastructure, or killed livestock and/or people.

Four of these occurred prior to 1945, three during the 1970s, one in the 1980s and four in the 1990s. Twenty-seven snowfall incidents have been recorded since 2000.

Recent significant snowfalls include:

- June 2006 – Canterbury
- September 2010 – Southland
- July 2011 – Canterbury
- August 2011 – Canterbury and Wellington (snow also fell in Auckland and Hamilton)
- June 2012 – Canterbury

A graph of snow depths in cm recorded in Ashburton is shown in Figure 6 below: -

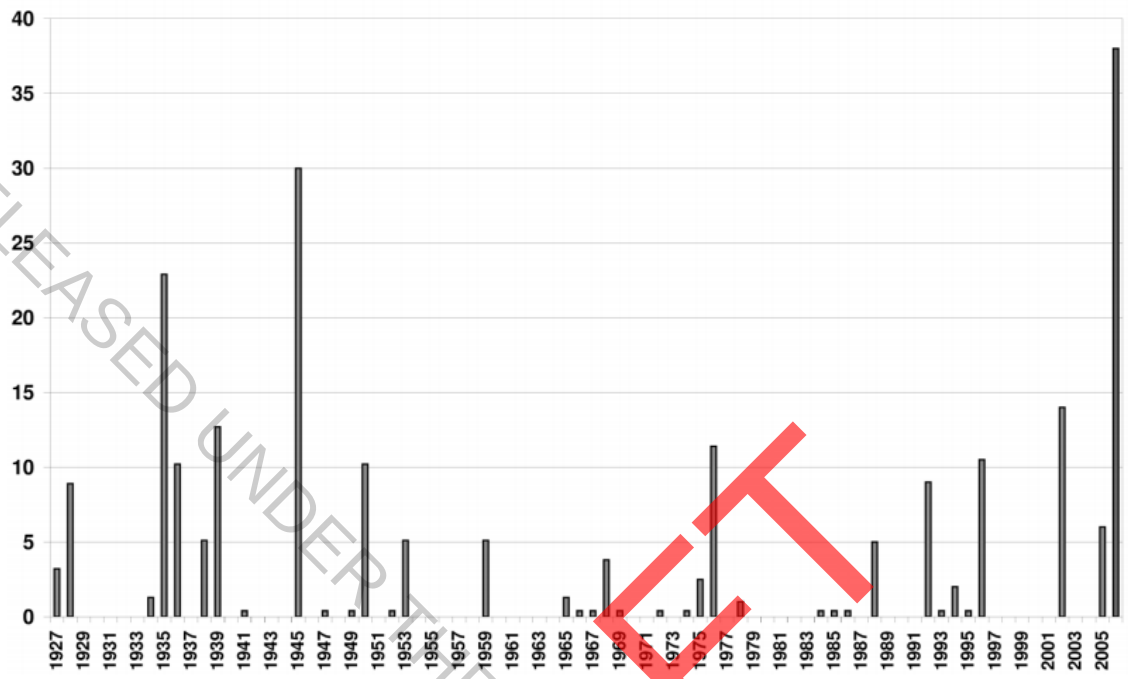

Figure 6 Maximum observed annual snow depths for station H31971 in Ashburton for the period 1927-2006

http://hydrologynz.co.nz/downloads/20110419-044745-JoHNZ_2007_v46_1_Hendrikx.pdf

Historical snow loads had used snow densities from international data, but snow near sea level in New Zealand can be quite dense, with recorded values ranging between 170 and 600kg/m3, (the Loadings Standard uses a value of 290kg/m3.) In June 2006, a large storm dumped record snows on parts of Canterbury, collapsing several buildings and disrupting electricity networks, communication systems, and transport systems. At the request of the Department of Building and Housing (now MBIE), NIWA also researched the snow loads exerted by that storm, which reached 1.2kPa at a Timaru weighbridge – four times the acceptable one-in-25-year limit in the Building Code of the time.

NIWA's subsequent report highlighted instances where observed ground snow loading had even surpassed the one-in-150-year standard, and said that the snow densities specified in the AS/NZS standard were a "key deficiency."

The New Zealand Building Code changed the basic snow load in Canterbury from 0.6kPa to 0.9kPa in 2010.

The effect of global warming is unknown but there are scenarios that could reduce or increase the load from the current level.

3.5 Recommendations

We recommended carrying out an assessment to check the capacity of these roofs as highlighted in Figure 4 due to the increase in snow loads, especially the laundry building and pre-school canopy structure.

4 Building 1 Forensic Services

4.1 General

The building was constructed in 1990. It is timber framed with brick veneer and has a clay tile roof. Modifications/extensions were made to the building around the year 2000. The building has predominantly steel framed windows.

The overall condition of Building 1 is rated at 2.6.

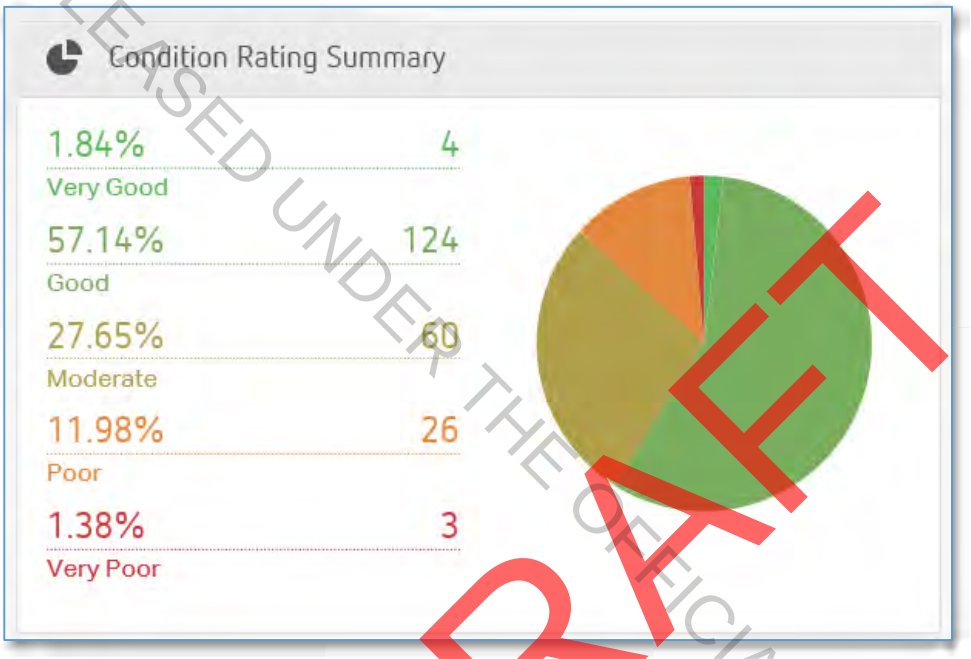

Figure 7 *Building 1 Overall Condition*

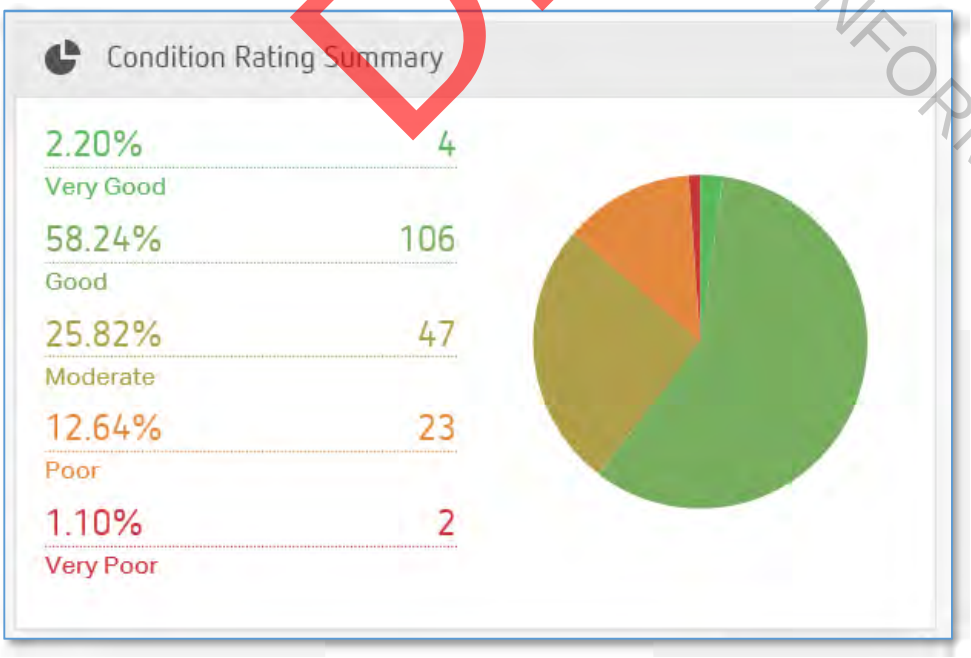

Figure 8 *Building 1 Condition of Exterior Elevations*

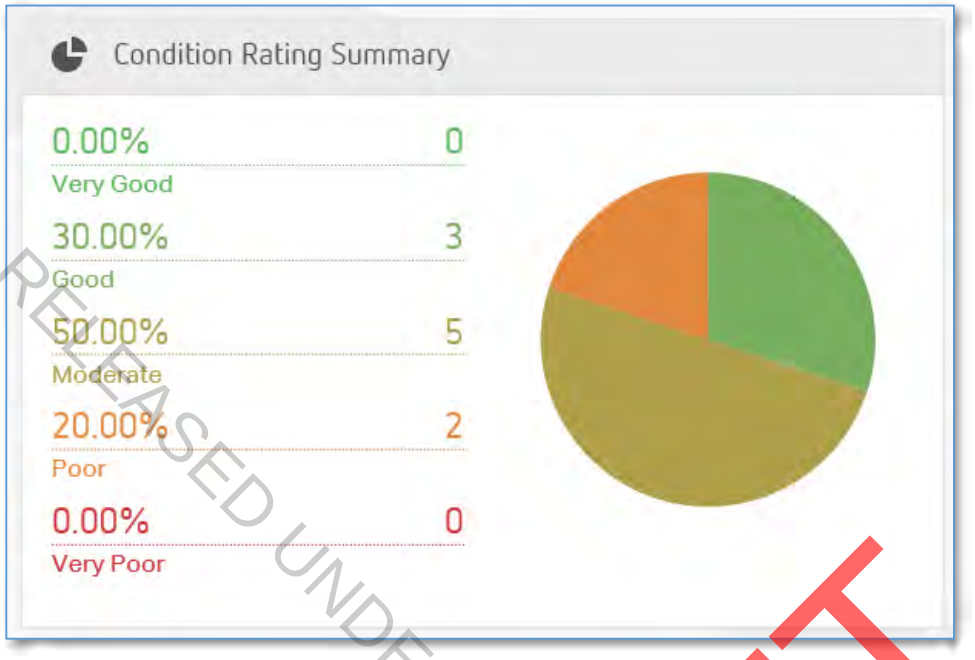

Figure 9 *Building 1 Roof Condition*

4.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Severe corrosion of steel window frames
- Upper roof gutters appear to be rusting
- Temporary roof repairs evidence of roof leaks
- Significant cracks in water tower brickwork
- Multiple cracks in rendered cladding

4.2 Mechanical Services

4.2.1 Heating, Cooling & DHW Plant

The heating plant for Building 1 is situated in G026, a ground floor plant room and associated roof plant deck.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

A heating water circulation pump supplies the heating water header from which three (3) zone pumps supply the building heating zones.

A calorifier circulation pump supplies heating water through the calorifier coil. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

The roof deck houses a chiller and a packaged air handling unit.

Heating plant appears to be well-maintained with no apparent issues requiring immediate attention. The mechanical plant generally including the primary heating water pump, calorifier pump, calorifier, chiller and air handling unit are into the second half of their service life and will exhibit increasing maintenance costs over the next ten years. Heating water zone pumps and domestic hot water circulation pump appear to have been replaced more recently and should have more than ten years expected service life remaining.

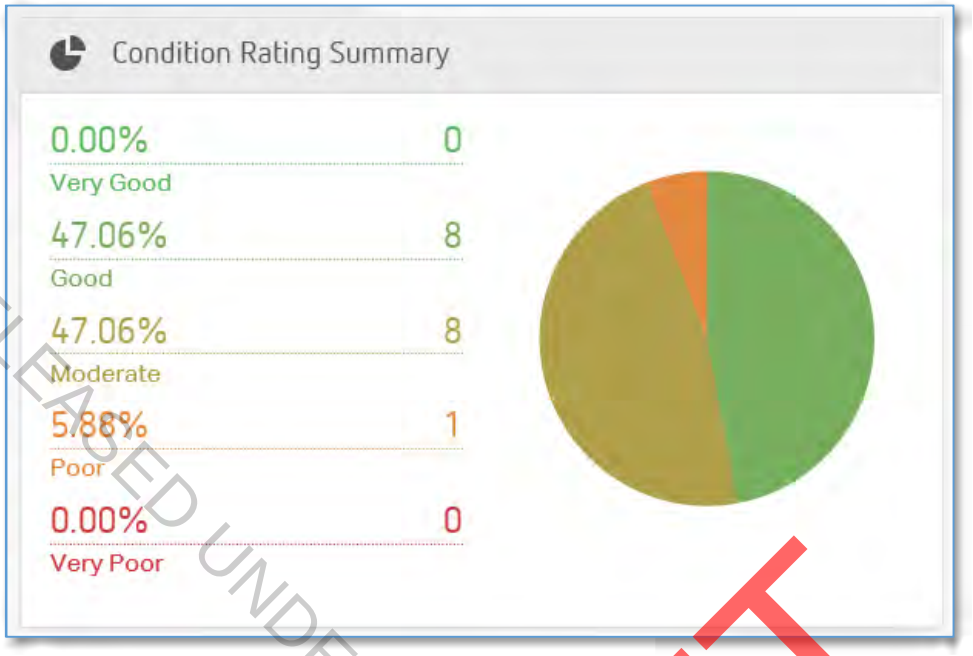

Figure 10 Building 1 Condition of Mechanical Systems

4.2.2 Recommendation

The mechanical plant, pumps, chiller, calorifier should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame.

The heating zone and domestic hot water circulation pumps should have an expected remaining service life of ten years.

4.3 Electrical Systems

4.3.1 Main Switchboard

The main switchboard for Building 1 is situated in the Switchboard Room. It is in good condition with modern switchgear and equipment.

4.3.2 Distribution Switchboards

There are six distribution switchboards and two mechanical controls boards servicing the building. With the exception of DB-L1, which is integral to the main switchboard and in good condition, the other distribution switchboards are in moderate condition with ageing switchgear and equipment.

The cover of one of the panels on DB-1 in the House Keeping Room is no longer secured to the panel. There are exposed live terminals in the aforementioned panel which requires urgent remediation for the safety of the users.

The mechanical controls board in corridor G007 is at the end of its' economic life and a replacement should be considered.

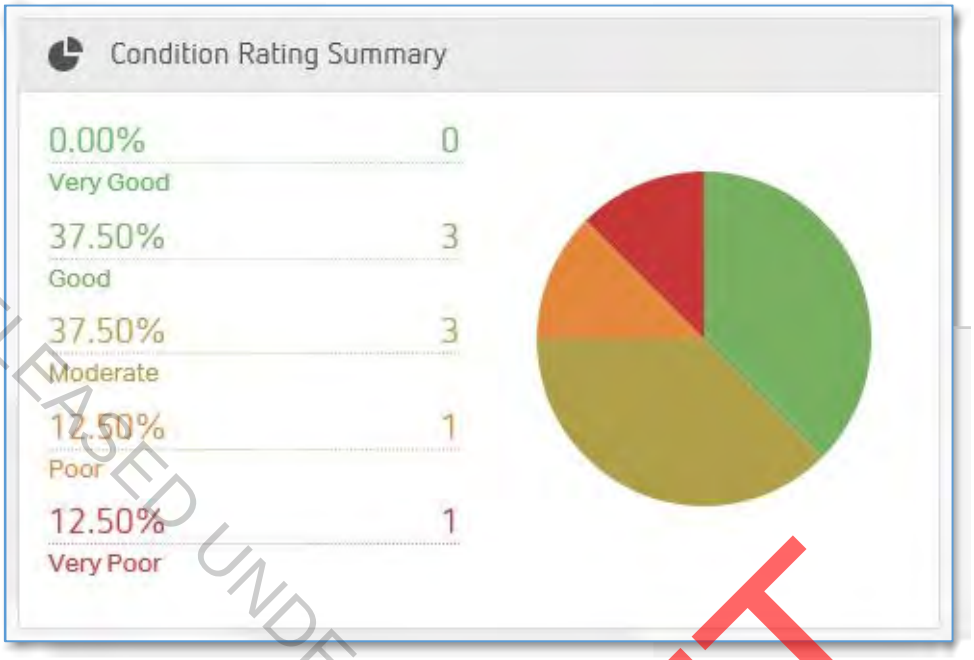

Figure 11 Building 1 Condition of Electrical Systems

4.3.3 Recommendations

- The main switchboard be replaced in 15-20 years.
- The distribution switchboards be replaced in 10-15 years.
- The mechanical controls board in corridor G007 be replaced within 5 years.

5 Building 2 Te Awakura Acute Inpatient Services

5.1 General

The building was constructed in 1980. It is timber framed with a variety of cladding systems and has a long run steel and butanol roof. Modifications/extensions were made to the building around the year 1998. The building has predominantly aluminium framed windows.

The building was subject to substantial alterations and extensions in 1998. The overall condition of the building is rated as 2.2.

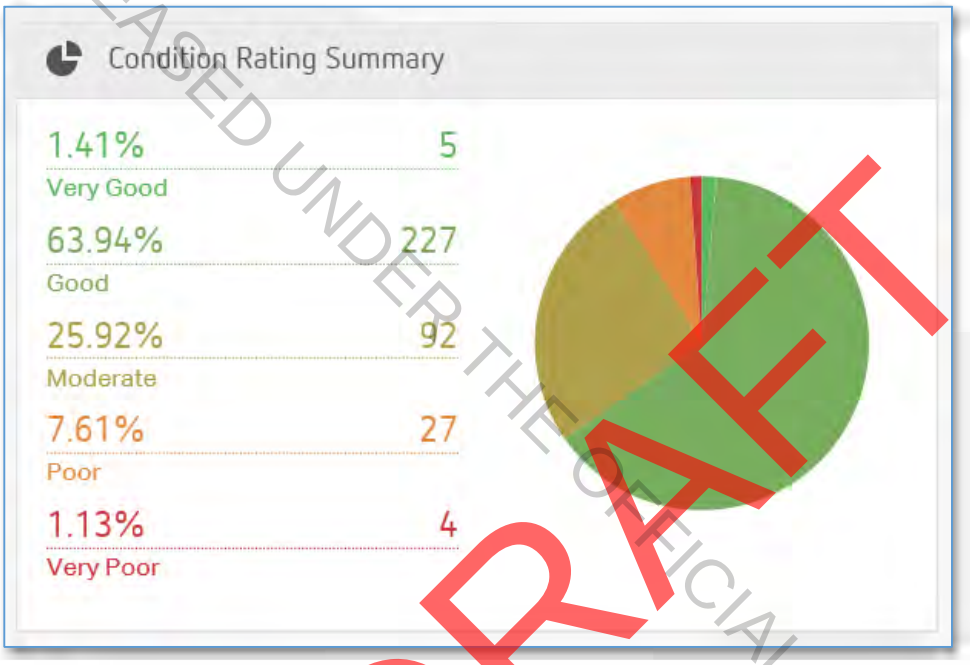

Figure 12 *Building 2 Overall Condition*

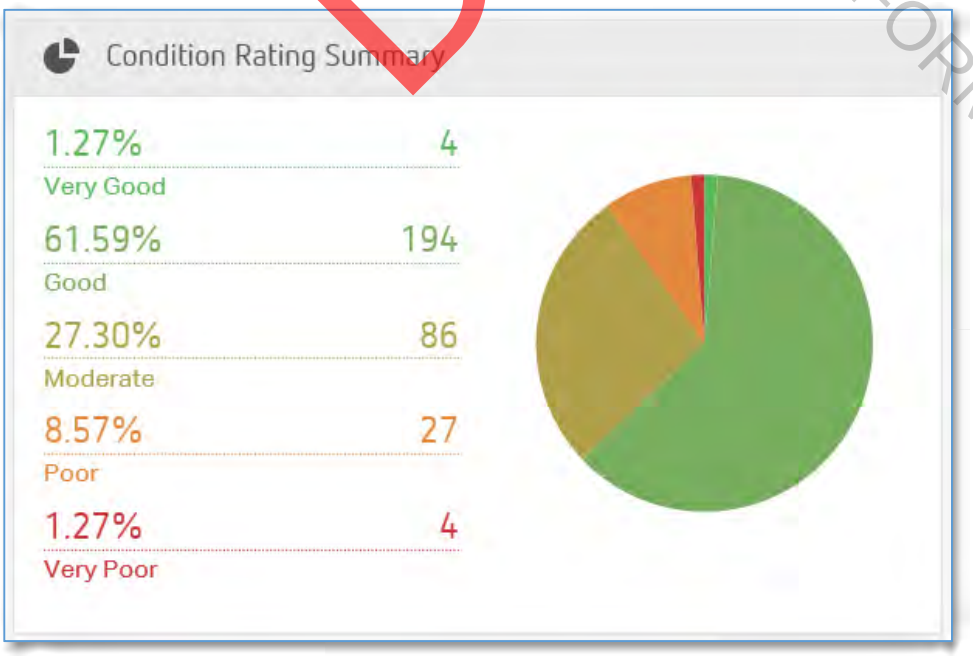

Figure 13 *Building 2 Condition of Exterior Elevations.*

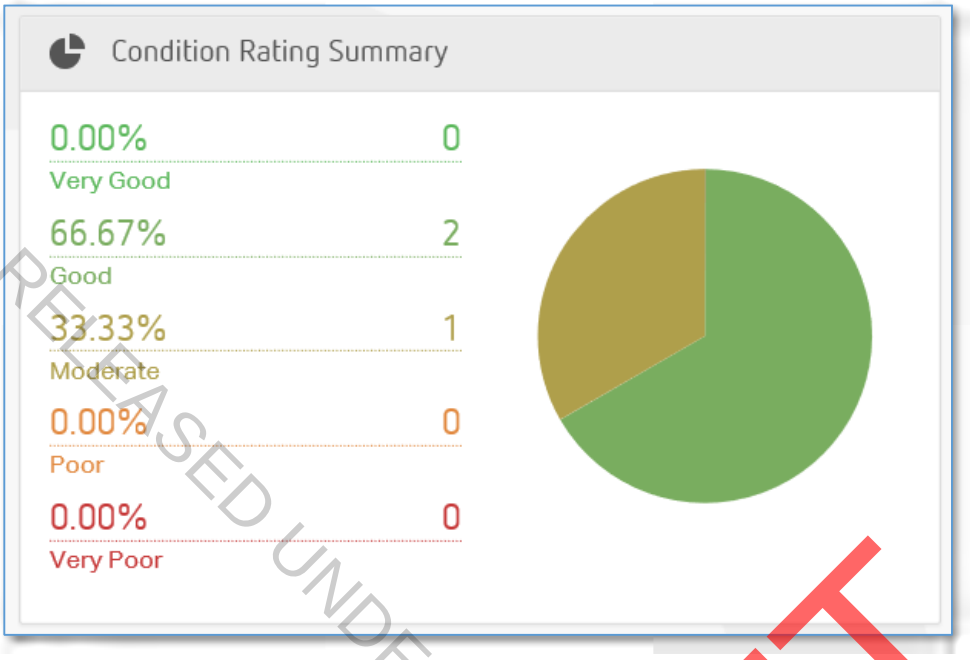

Figure 14 Building 2 Condition of Roof

5.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Rubber seals to skylight glass falling out
- Materials left on roof. Note that these lengths of timber are weathered, indicating that they have been on the roof for some time. There was a major HVAC project underway when our survey was undertaken, and there were large amounts of material on the roof- suggest checking the roof following completion of the project to ensure that all materials have been removed
- Damage to parapet walls- central triangular roof. Likelihood of serious water damage to wall.
- Large crack in feature wall. Will be allowing water ingress. Assessment was done during large HVAC project- need to ensure that all materials currently on roof are removed.
- Multiple cracks in concrete render
- Exterior doors rotting, frames bent, glass panels broken

5.2 Mechanical Services

5.2.1 Heating Plant

The heating plant for Building 2 is situated in G05, a basement plant room and associated fenced area.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

A calorifier circulation pump supplies heating water through the calorifier coil. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

The fenced yard outside the plant room will house a new mini-chiller in the process of being installed.

Heating plant appears to be well-maintained with no apparent issues requiring immediate attention. The mechanical plant generally including the primary heating water pump, calorifier pump, calorifier, chiller and air handling unit are in the second half of their service life and will exhibit increasing maintenance costs over the next ten years. Heating water zone pumps and domestic hot water circulation pump appear to have been replaced more recently and should have more than ten years expected service life remaining.

Building 2 Condition of Mechanical Systems

5.2.2 Recommendation

The mechanical plant: pumps, chiller, calorifier, heat exchangers, are in the first half of their service life and should have an expected remaining service life of over ten years.

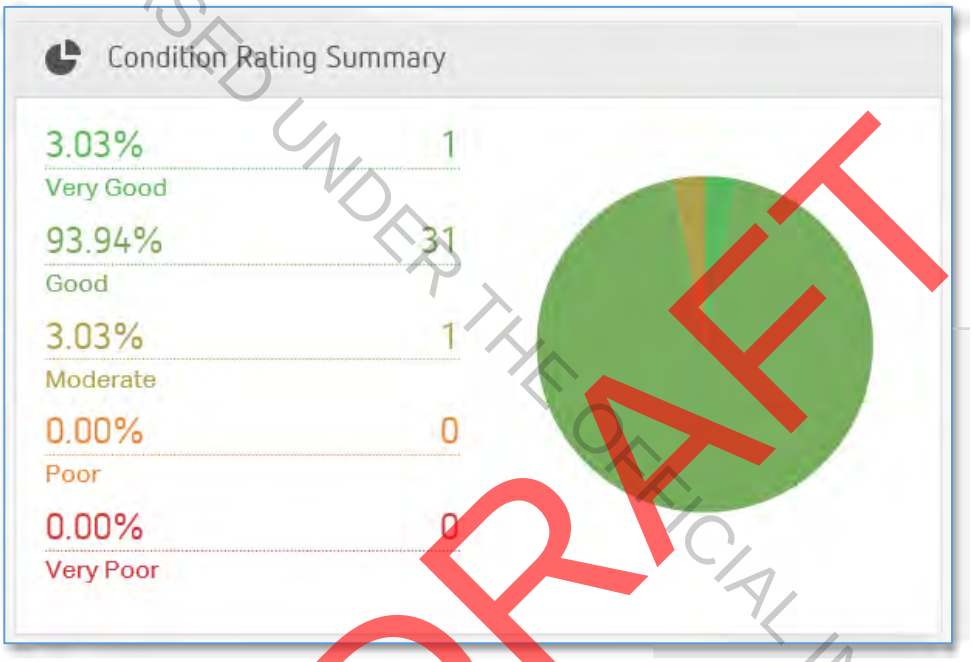

Figure 15 *Building 2 Condition of Mechanical Systems*

5.3 Electrical Systems

5.3.1 Main Switchboard

The main switchboard for Building 2 is situated in the Switchboard Room. It is in good condition with modern switchgear and equipment.

5.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls boards servicing the building are of the same age and make, in good condition with modern switchgear and equipment.

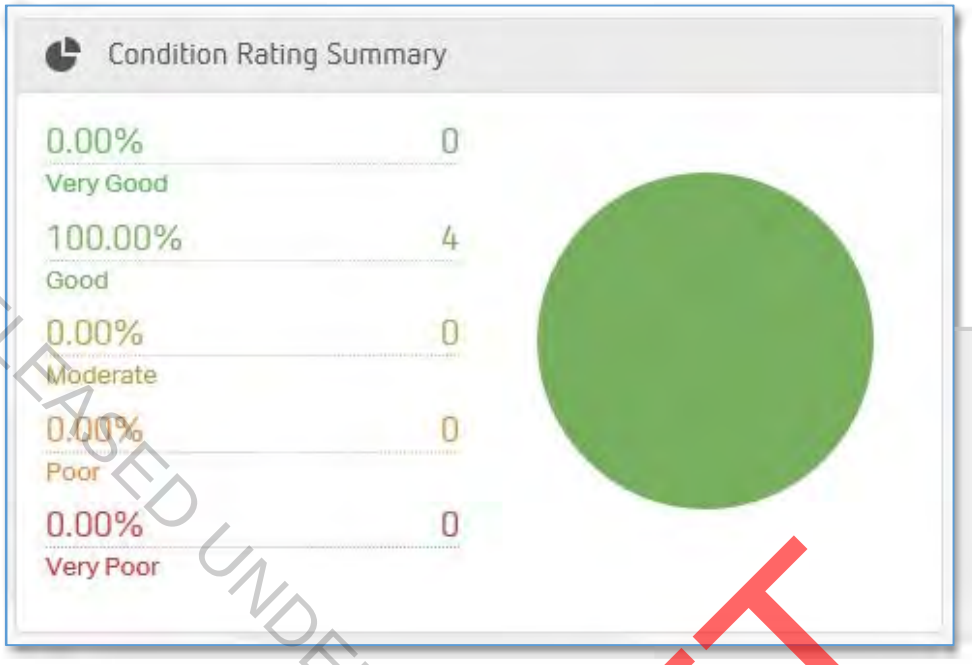

Figure 16 Building 2 Condition of Electrical Systems

5.3.3 Recommendations

The main switchboard, distribution switchboards and mechanical controls boards be replaced in 15-20 years.

6 Building 3 Aroha Pai

6.1 General

The building was constructed in 1971. It is timber framed with brick veneer and profiled metal cladding systems and has a corrugated iron roof. Modifications/extensions were made to the building around the year 1999. The building has predominantly timber framed windows.

The building had significant alterations and extensions in 1999. The overall condition of the building is rated at 3.1.

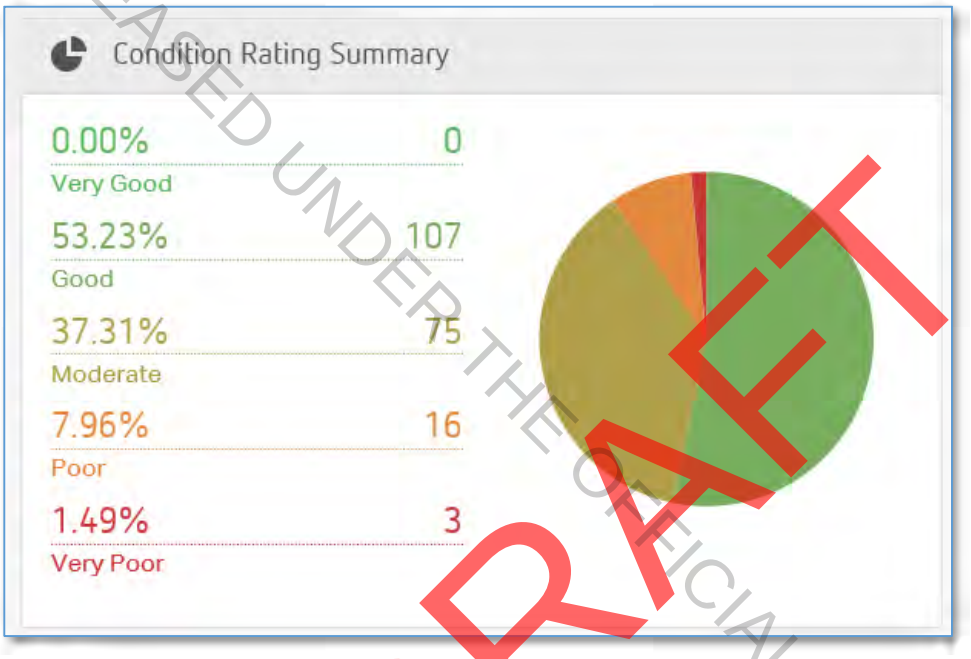

Figure 17 Building 3 Overall Condition

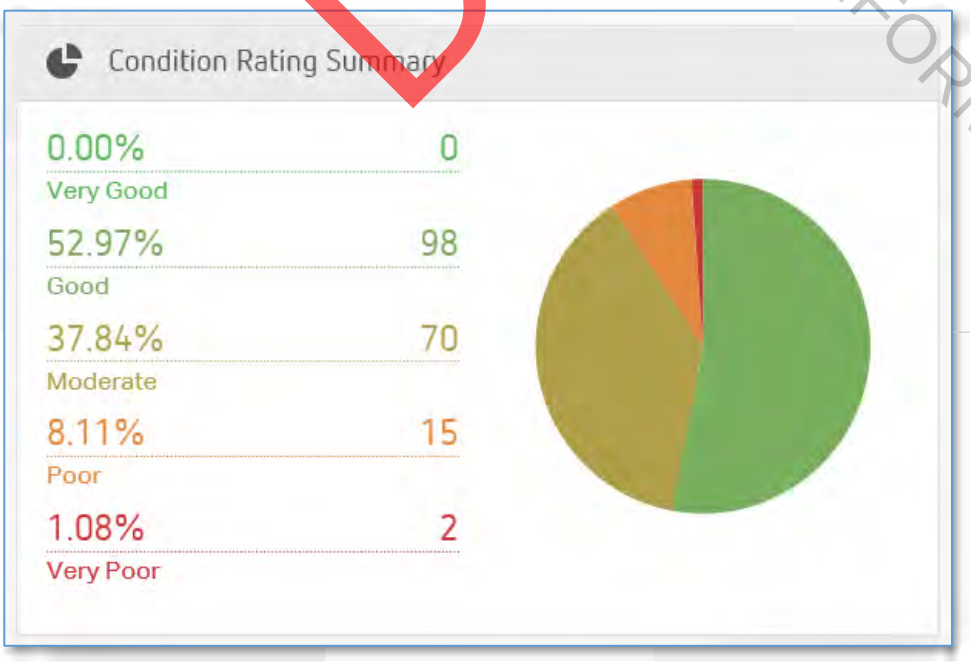

Figure 18 Building 3 Condition of Exterior Elevations

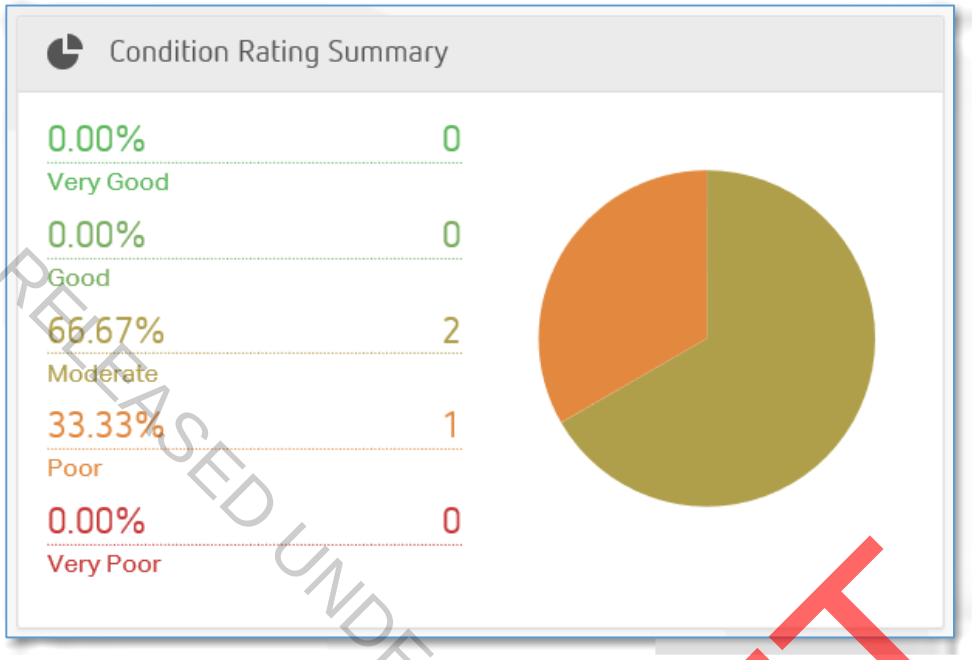

Figure 19 Building 3 Condition of Roof

6.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Severe corrosion of metal frame of windows
- Evidence of rust to sheet ends under ridge flashing
- Cracks and water ingress where fascia meets plaster
- Barge is cracked. Also looks like flat roof is poorly designed and is allowing water ingress
- Evidence of water ingress and rot.

6.2 Mechanical Services

6.2.1 Heating Plant

The heating plant for Building 3 is situated in Calorifier Room G048.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

Site reticulated heating water is circulated through a shell and tube heat exchanger to generate low temperature heating water for the building comfort heating and domestic hot water. Heating water is pumped to radiators through the building. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

Heating plant appears to be well-maintained with no apparent issues requiring immediate attention. The mechanical plant generally including the heat exchanger and calorifier are in the second half of their service life and will exhibit increasing maintenance costs over the next ten years. Pumps: heating water circulation, LTHW, calorifier circulation and domestic hot water circulation pumps appear to have been replaced more recently and should have more than ten years expected service life remaining.

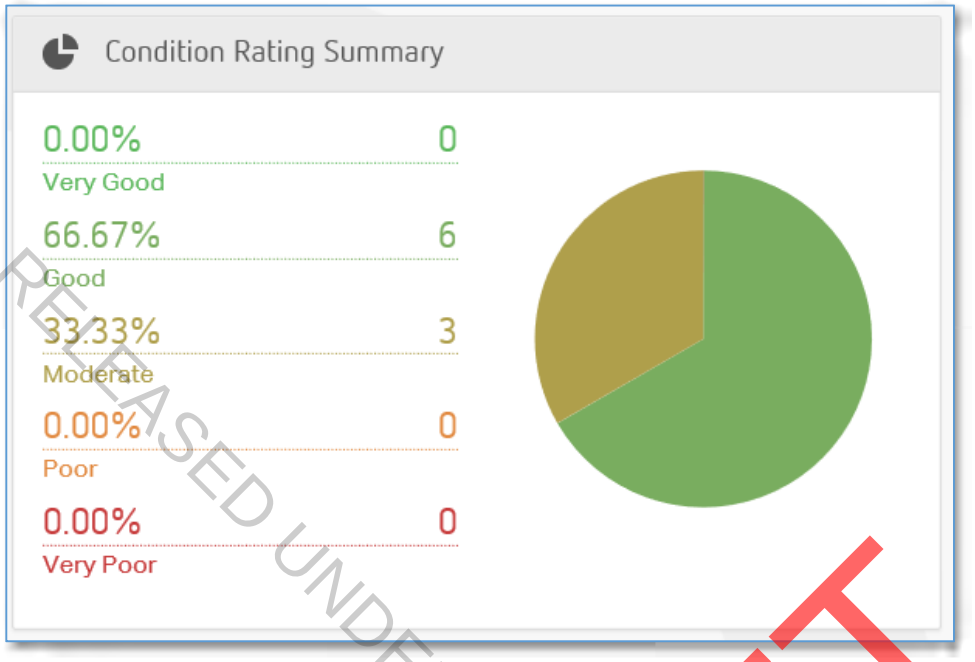

Figure 20 Building 3 Condition of Mechanical Systems

6.2.2 Recommendation

The mechanical plant, calorifier and heat exchanger are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame.

The pumps and control valves are in the first half of their service life and should have an expected remaining service life of over ten years.

6.3 Electrical Systems

6.3.1 Main Switchboard

The main switchboard for Building 3 is situated in the Switchboard Room. It is in good condition with modern switchgear and equipment.

6.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls boards servicing the building are in good condition with modern switchgear and equipment.

The exception is the mechanical controls board in the Plant Room, which is at the end of its' economic life. A replacement should be considered and will provide the opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, ageing switchgear and equipment are inefficient and potentially dangerous.

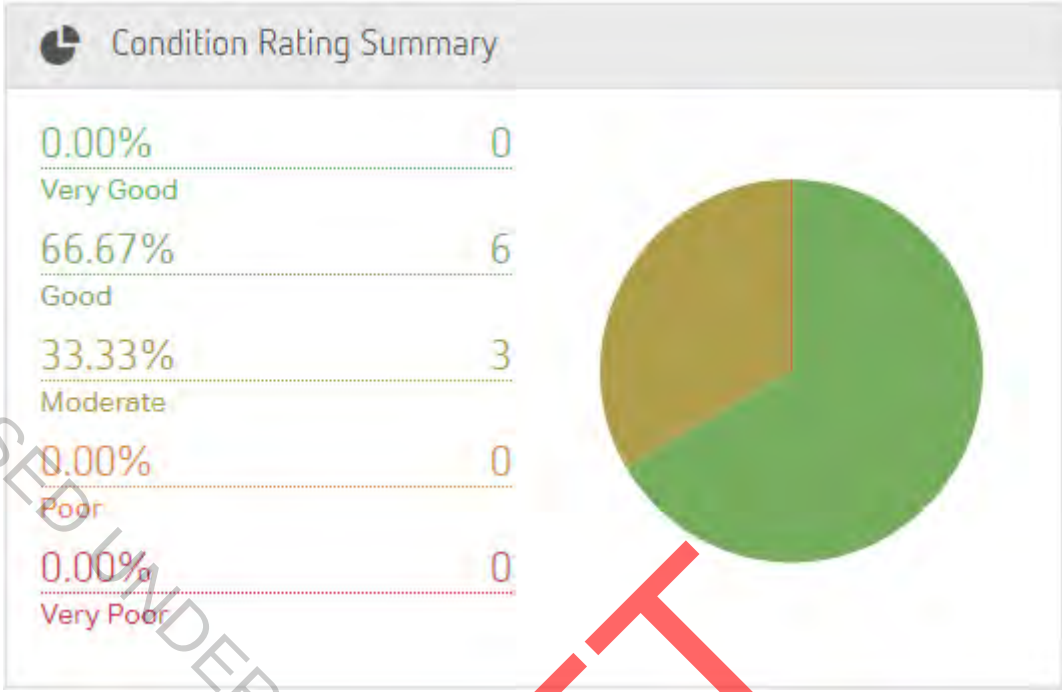

Figure 21 *Building 3 Condition of Mechanical Systems*

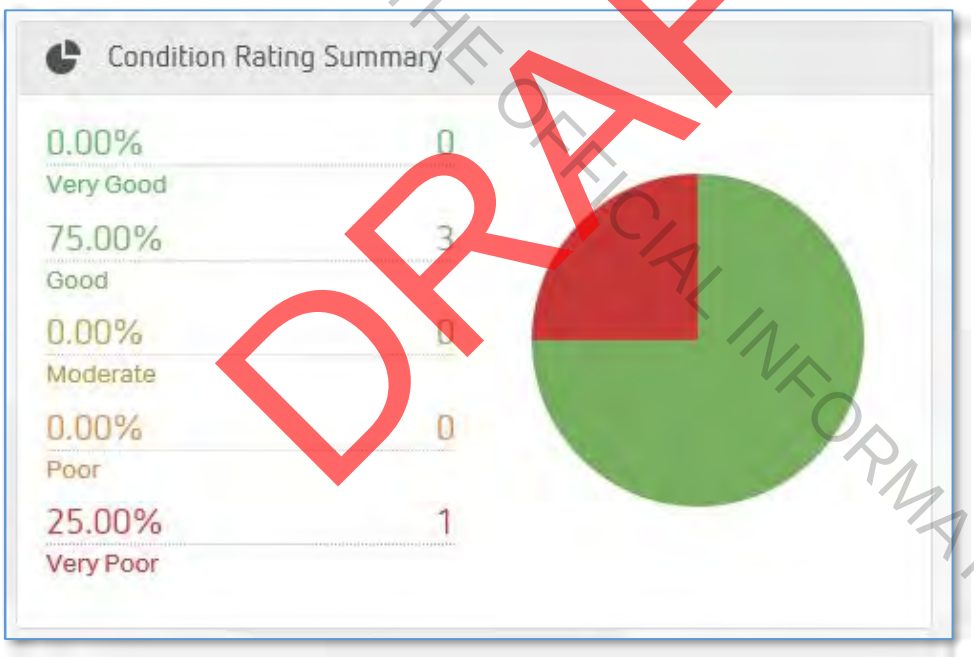

Figure 22 *Building 3 Condition of Electrical Systems*

6.3.3 Recommendations

- The main switchboard, distribution switchboards and mechanical controls boards (with the exception below) be replaced in 15-20 years.
- The mechanical controls board in the Plant Room be replaced within 5 years.

7 Building 4 Te Waimokihi

7.1 General

The building was constructed in 1971. It is timber framed with brick and profiled metal cladding systems and has a corrugated iron roof. The building has predominantly timber framed windows.

The overall condition of Building 4 is rated at 3.3.

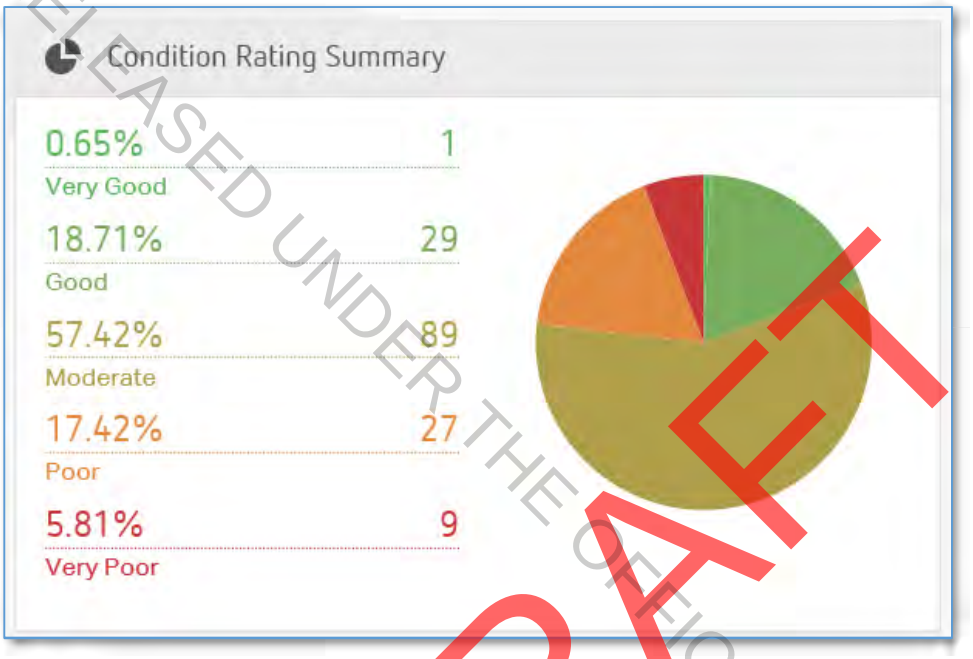

Figure 23 Building 4 Overall Condition

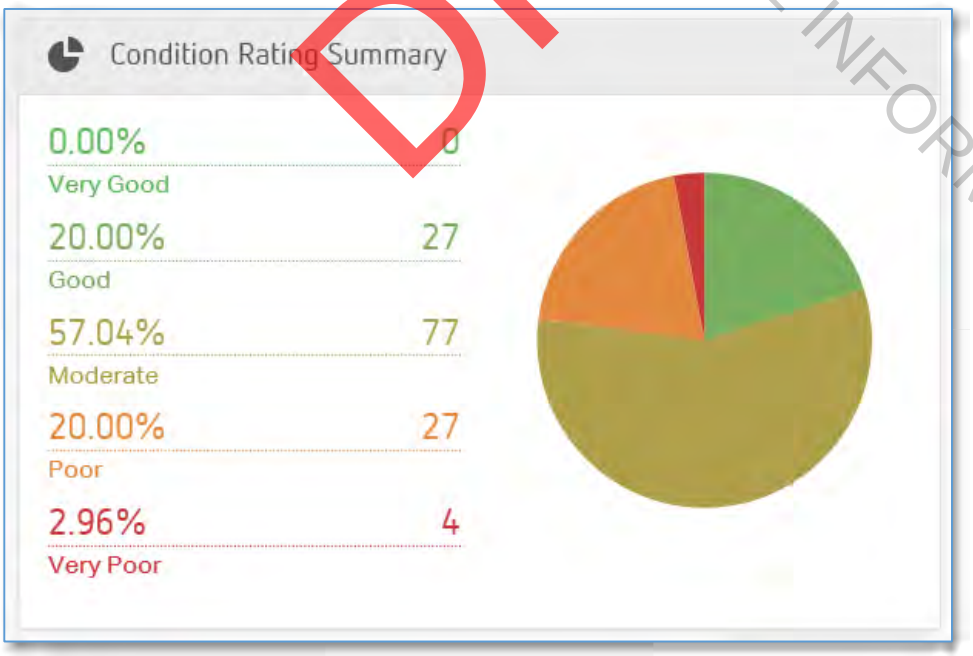

Figure 24 Building 4 Condition of Exterior Elevations

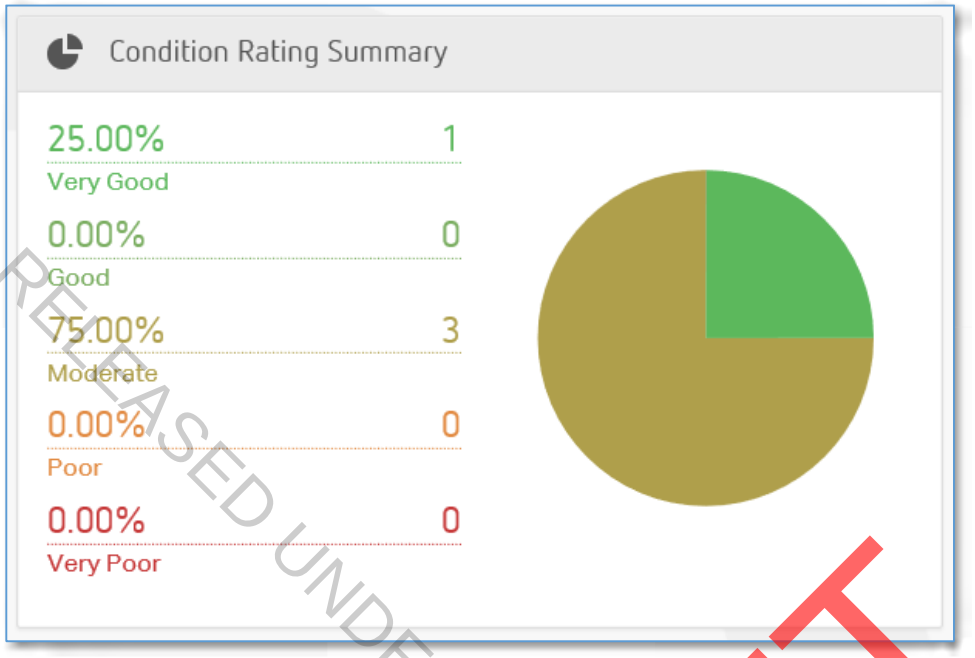

Figure 25 Building 4 Condition of Roof

7.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Cracked cladding panels possibly asbestos
- Blocked internal gutters
- Some evidence of rot in timber window frames

7.2 Mechanical Services

7.2.1 Heating Plant

The heating plant for Building 4 is situated in Calorifier Room G029.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

Site reticulated heating water is circulated through a shell and tube heat exchanger to generate low temperature heating water for the building comfort heating and domestic hot water. Heating water is pumped to radiators through the building. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

The mechanical plant generally including the heat exchanger and calorifier are in the second half of their service life and will exhibit increasing maintenance costs over the next ten years. The mechanical control panel is original building equipment and should be replaced along with other electrical boards. The calorifier circulation pump and one mixing valve show signs of leakage and require maintenance attention.

Pumps: heating water circulation, LTHW, and domestic hot water circulation pumps appear to have been replaced more recently and should have more than ten years expected service life remaining.

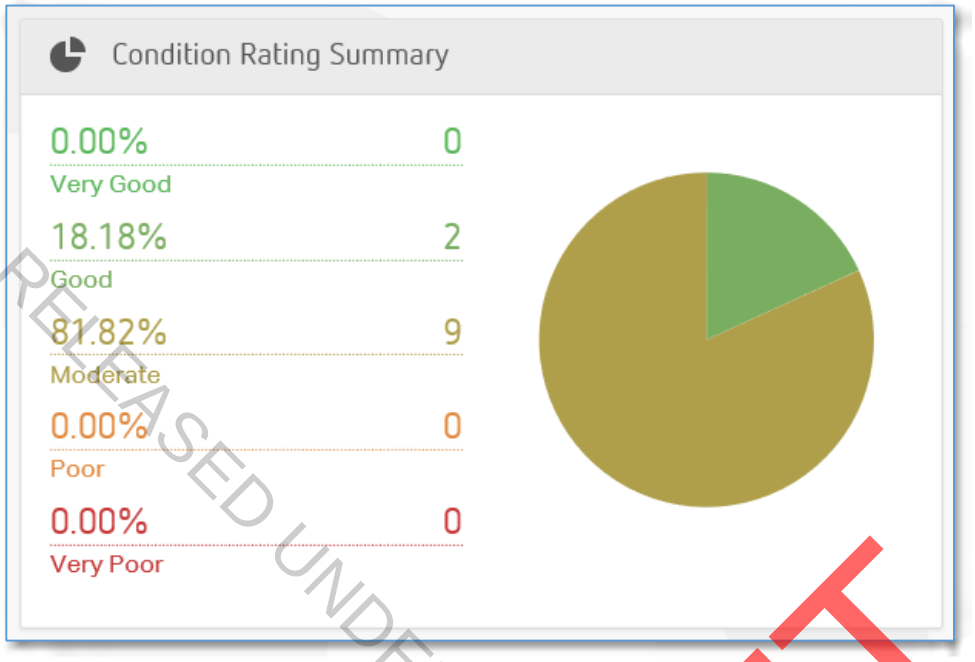

Figure 26 Building 4 Condition of Mechanical Systems

7.2.2 Recommendation

The mechanical plant, calorifier and heat exchanger are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame. The mechanical control panel should be replaced along with other electrical boards.

The pumps and control valves are in the first half of their service life and should have an expected remaining service life of over ten years.

7.3 Electrical Systems

7.3.1 Main Switchboard

The main switchboard for Building 4 is situated in the Switchboard Room. Although in good condition, the main switchboard is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, ageing switchgear and equipment are inefficient and potentially dangerous.

7.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls board servicing the building are of the same age as the main switchboard and similarly, replacements should be considered.

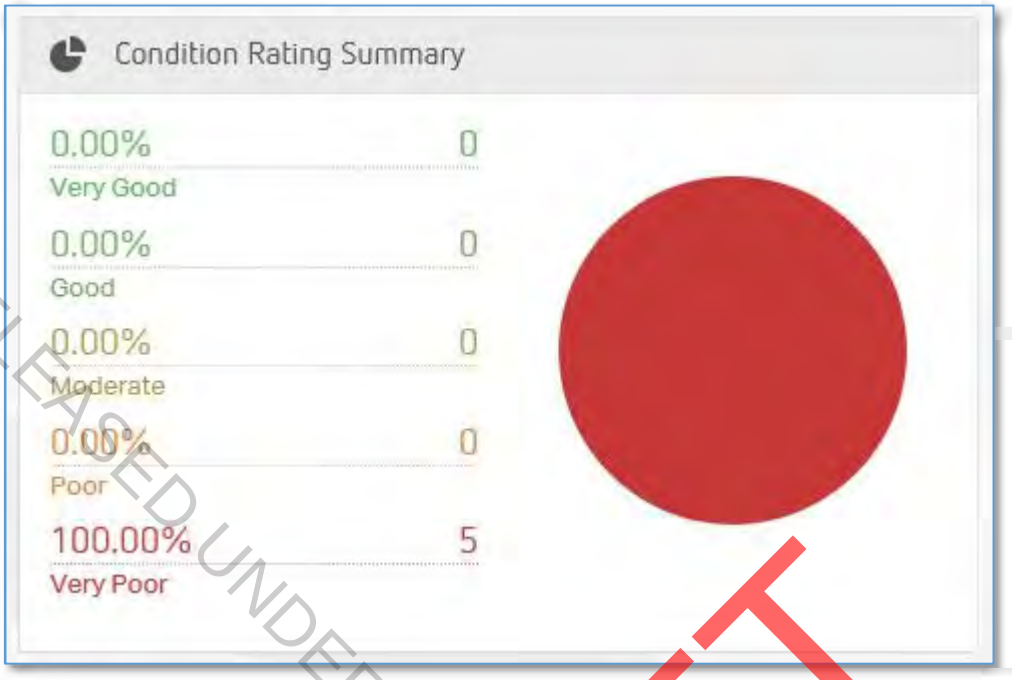

Figure 27 Building 4 Condition of Electrical Systems

7.3.3 Recommendations

The main switchboard, distribution switchboards and mechanical controls board should be replaced within 5 years.

8 Building 5 Te Whare Mauri Ora

8.1 General

The building was constructed in 1971. It is timber framed with brick veneer and profiled metal cladding systems and has a corrugated iron roof. The building has predominantly timber framed windows.

The overall condition of Building 5 is rated at 3.3.

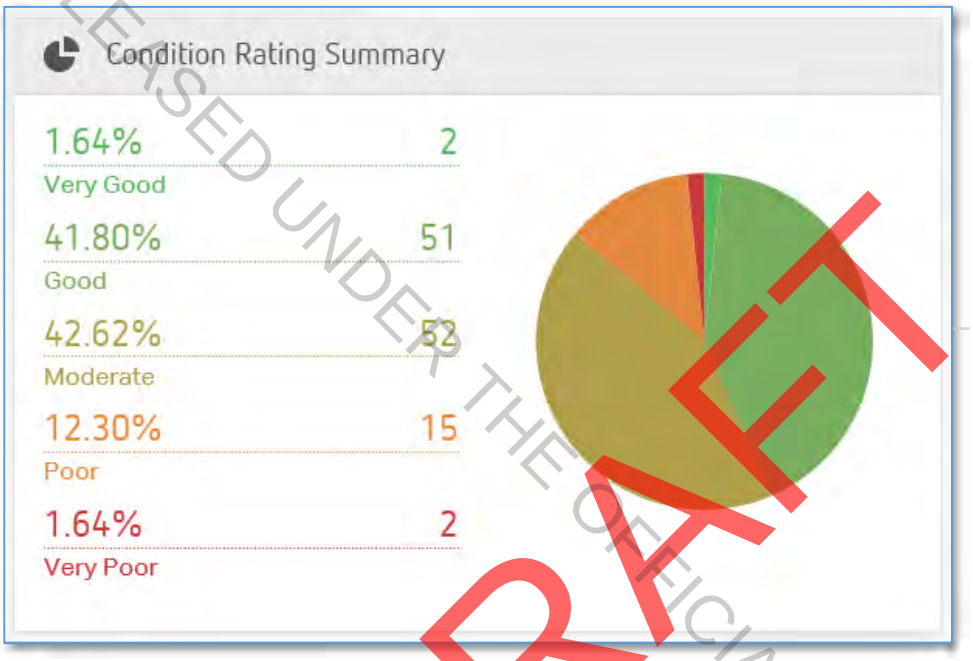

Figure 28 Building 5 Overall Condition

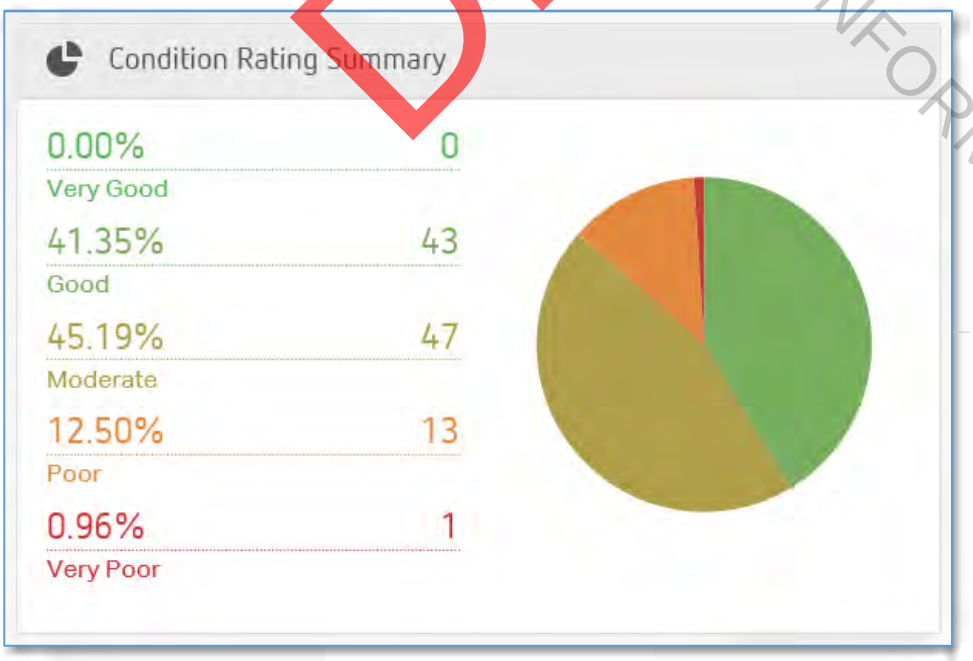

Figure 29 Building 5 Condition of Exterior Elevations

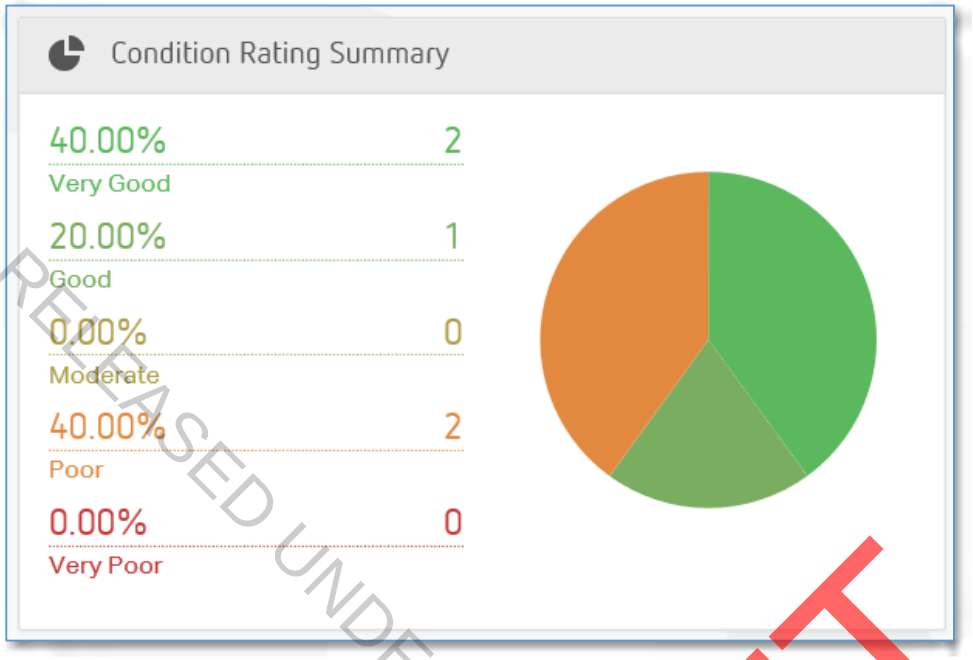

Figure 30 Building 5 Condition of Roof

8.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Suspect sheet ends at ridge are rusting. Ridge flashing has been replaced and there are a few patches of primer on the roof
- Cracks in suspected asbestos sheeting

8.2 Mechanical Services

8.2.1 Heating Plant

The heating plant for Building 5 is situated in Calorifier Room G057.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

Site reticulated heating water is circulated through a shell and tube heat exchanger to generate low temperature heating water for the building comfort heating and domestic hot water. Heating water is pumped to radiators through the building. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

The mechanical plant generally including the heat exchanger and calorifier are in the second half of their service life and will exhibit increasing maintenance costs over the next ten years. The mechanical control panel is original building equipment and should be replaced along with other electrical boards.

Pumps: heating water circulation, LTHW, and domestic hot water circulation pumps appear to have been replaced more recently and should have more than ten years expected service life remaining.

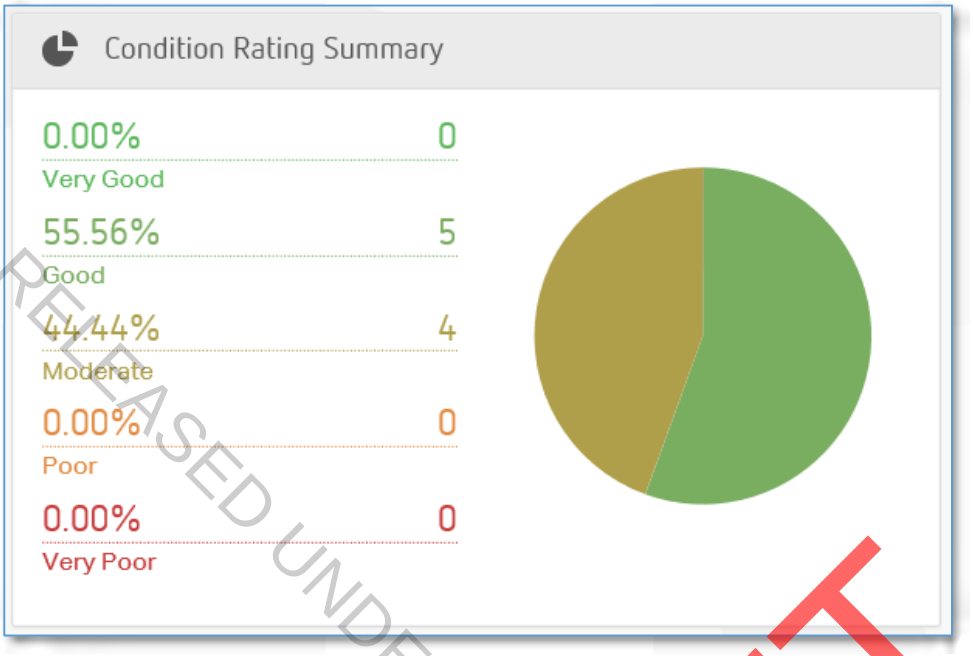

Figure 31 *Building 5 Condition of Mechanical Services*

8.2.2 Recommendation

The mechanical plant, calorifier and heat exchanger are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame. The mechanical control panel should be replaced along with other electrical boards.

The pumps and control valves are in the first half of their service life and should have an expected remaining service life of over ten years.

8.3 Electrical Systems

8.3.1 Main Switchboard

The main switchboard for Building 5 is situated in the Switchboard Room. It is in good condition with modern switchgear and equipment.

8.3.2 Distribution Switchboards

The distribution switchboards servicing the building are in good condition with modern switchgear and equipment.

The mechanical controls board in the Plant Room is at the end of its' economic life. A replacement should be considered and will provide the opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, ageing switchgear and equipment are inefficient and potentially dangerous.

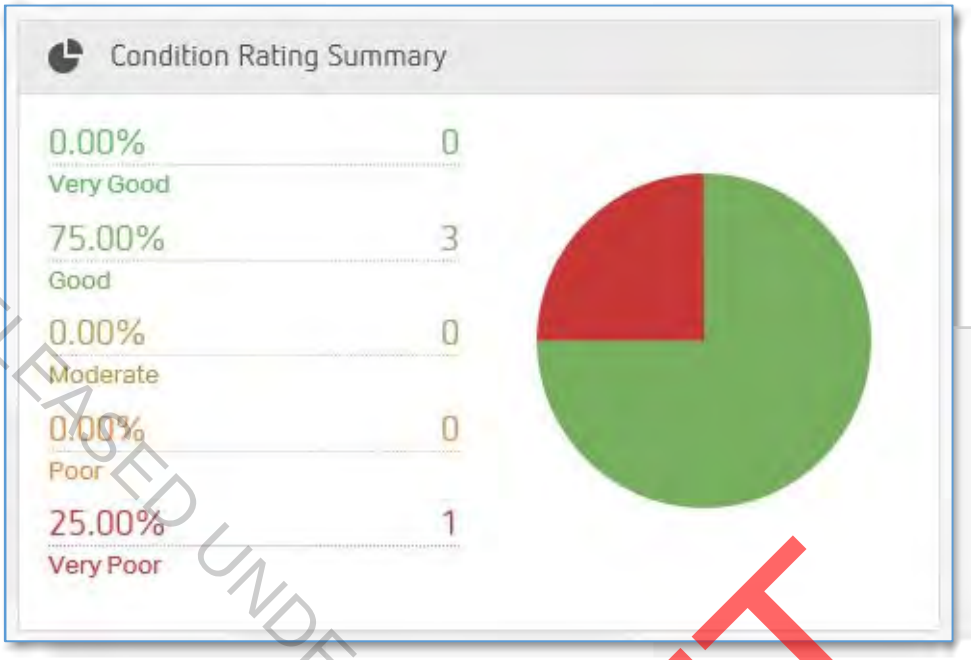

Figure 32 Building 5 Condition of Electrical Services

8.3.3 Recommendations

- The main switchboard and distribution switchboards be replaced in 15-20 years.
- The mechanical controls board in the Plant Room be replaced within 5 years.

9 Building 6 Avon Administration

9.1 General

The building was constructed in 1930. It is timber framed with a weatherboard cladding system and has a corrugated iron roof. Modifications/extensions were made to the building around the years 1978, 1999 and further unknown dates. The building has predominantly timber framed windows. The overall condition of the building is rated at 3.1.

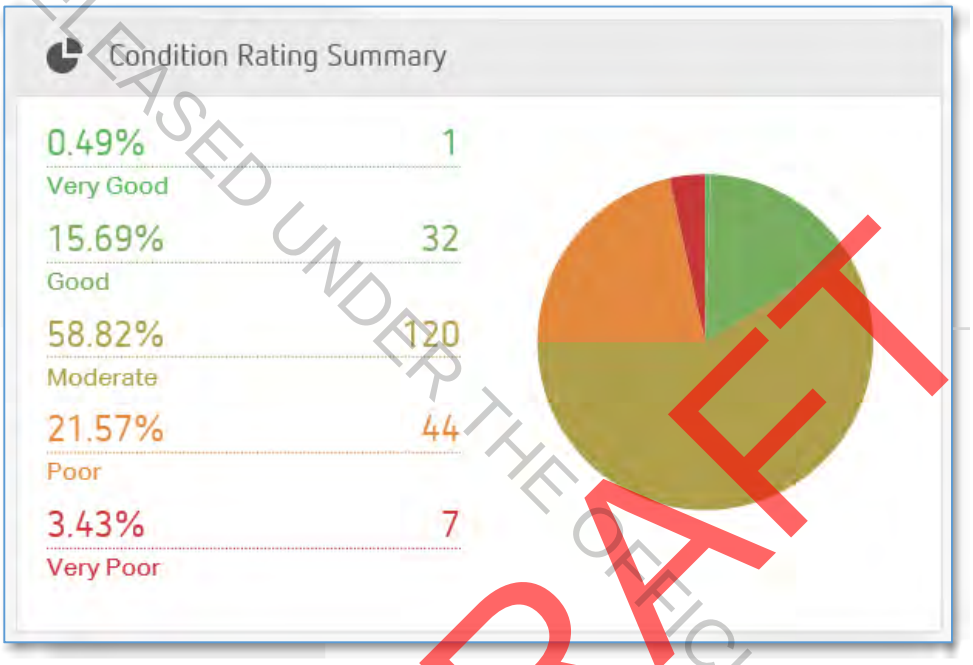

Figure 33 *Building 6 Overall Condition*

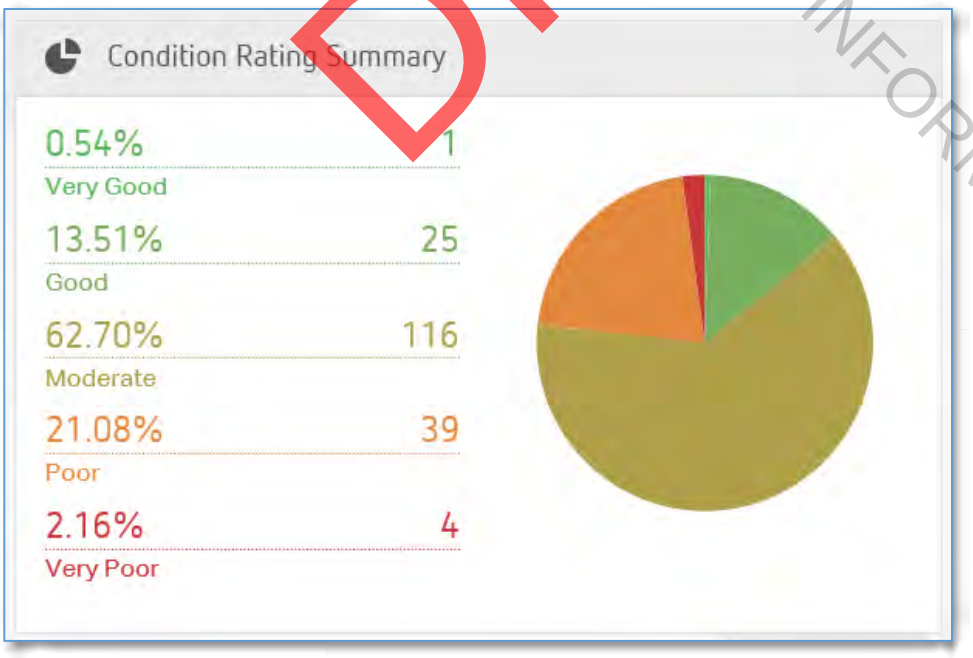

Figure 34 *Building 6 Condition of Exterior Elevations*

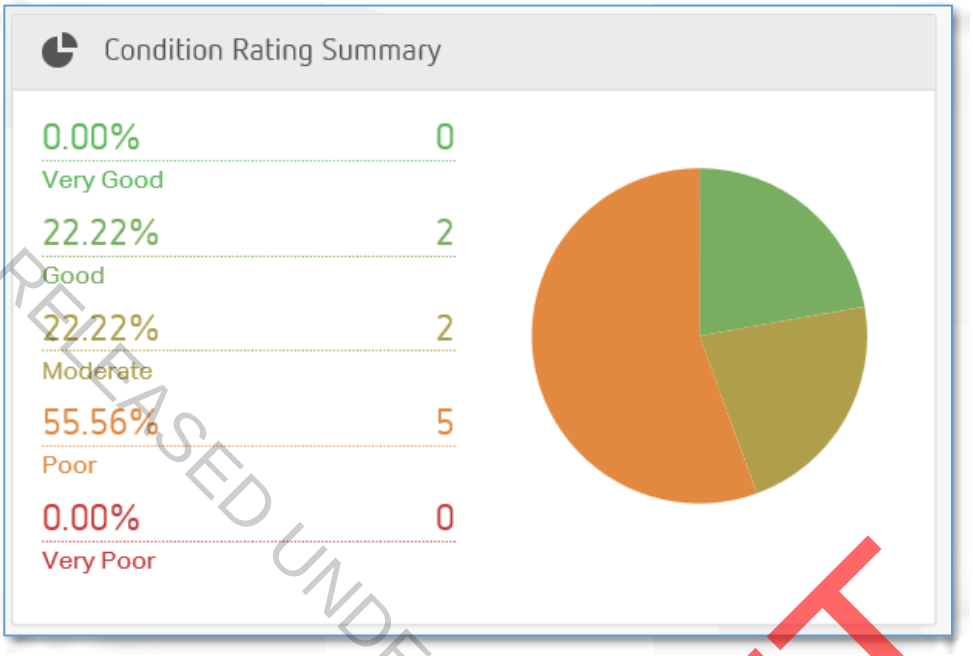

Figure 35 Building 6 Condition of Roof

9.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Subfloor vents below hardstand. Will allow water to enter subfloor space
- Multiple hairline cracks found in foundation ring beam
- Areas of advanced rot in weatherboards
- Paint flaking off weatherboards

9.2 Mechanical Services

9.2.1 Heating Plant

The heating plant for Building 6 is situated in Calorifier Room G052.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

Site reticulated heating water is circulated through a shell and tube heat exchanger to generate low temperature heating water for the building comfort heating and domestic hot water. Heating water is pumped to radiators through the building. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

The mechanical plant generally including the heat exchanger, calorifier and the LTHW pump are in the second half of their service life and will exhibit increasing maintenance costs over the next ten years. The mechanical control panel is original building equipment and should be replaced along with other electrical boards.

The heating water circulation and domestic hot water circulation pumps appear to have been replaced recently and should have more than ten years expected service life remaining.

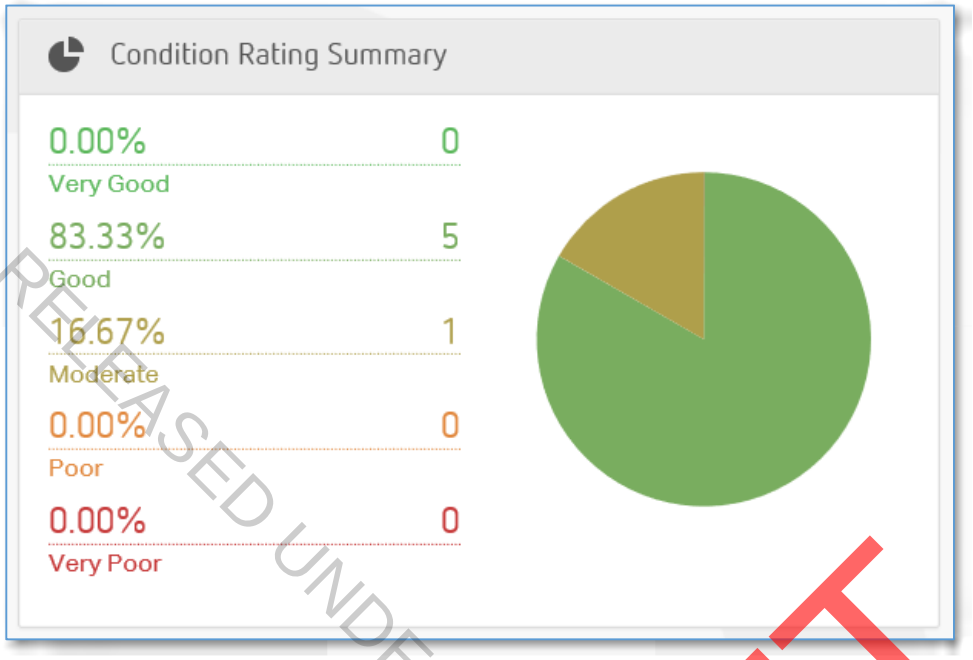

Figure 36 Building 6 Condition of Mechanical Services

9.2.2 Recommendation

The mechanical plant, calorifier, heat exchanger and LTHW pump are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame.

The mechanical control panel should be replaced along with other electrical boards.

The domestic hot water and calorifier pumps and control valves are in the first half of their service life and should have an expected remaining service life of over ten years.

9.3 Electrical Systems

9.3.1 Main Switchboard

The main switchboard for Building 6 is situated in the Switchboard Room. It is in good condition with modern switchgear and equipment.

9.3.2 Distribution Switchboards

The distribution switchboards servicing the building consist of old panels with modern switchgear and equipment, which are in moderate conditions.

The mechanical controls board in the Plant Room is at the end of its' economic life. A replacement should be considered and will provide the opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, ageing switchgear and equipment are inefficient and potentially dangerous.

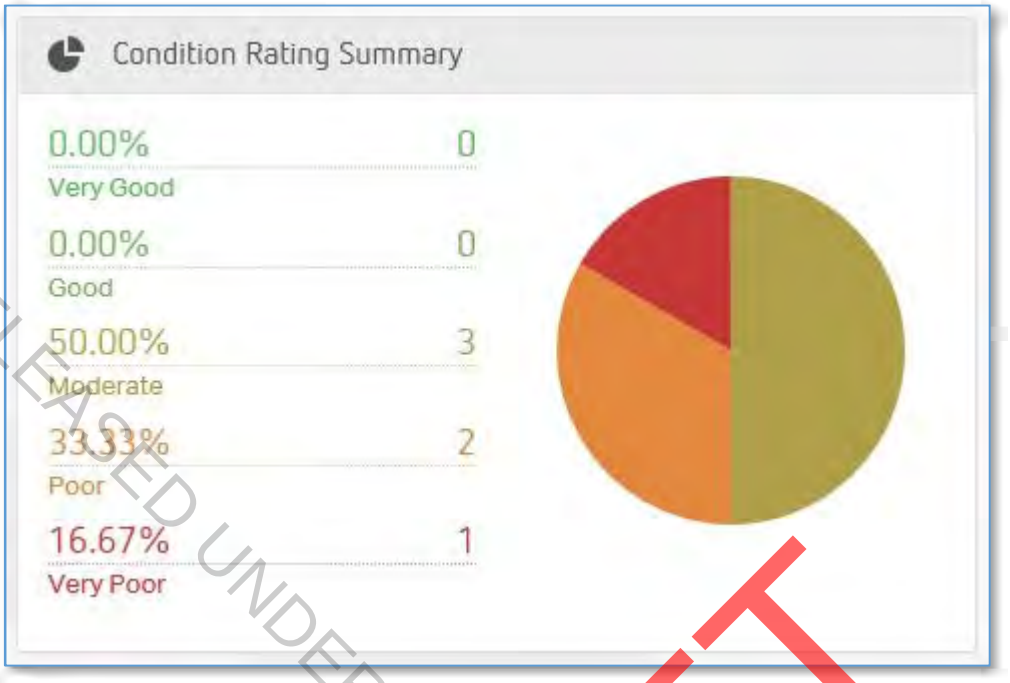

Figure 37 Building 6 Condition of Electrical Services

9.3.3 Recommendations

- The main switchboard should be replaced in 15-20 years.
- The distribution switchboards be replaced in 5-10 years.
- The mechanical controls board be replaced within 5 years.

10 Building 7 Energy Centre

10.1 General

The building was constructed in 1998. It is a reinforced concrete and concrete block structure and has a Diamond V-Rib roof. The building has predominantly aluminium framed windows. The overall condition of the building is rated at 2.3.

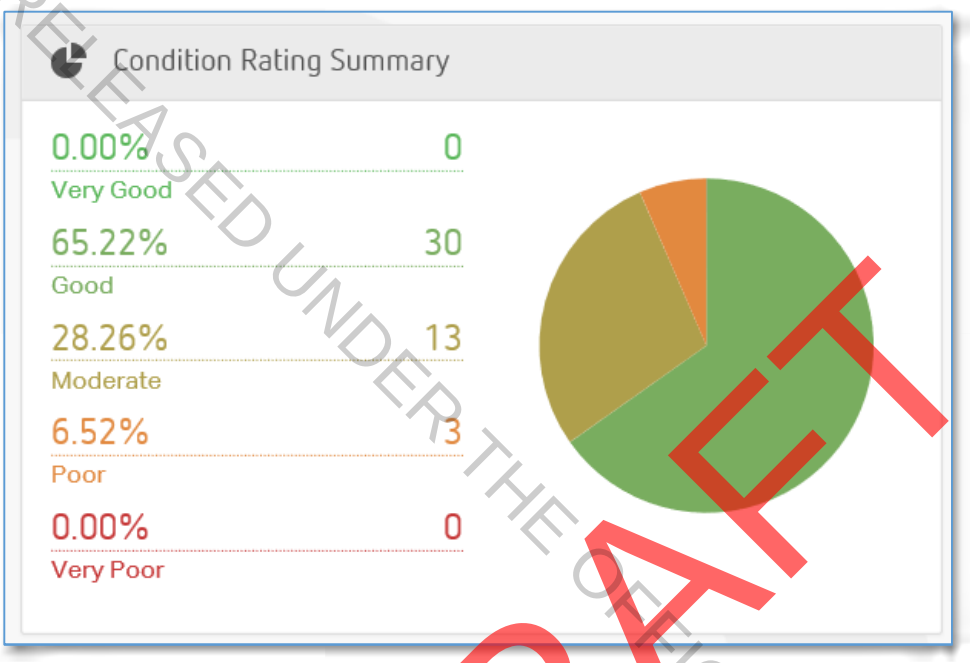

Figure 38 *Building 7 Overall Condition*

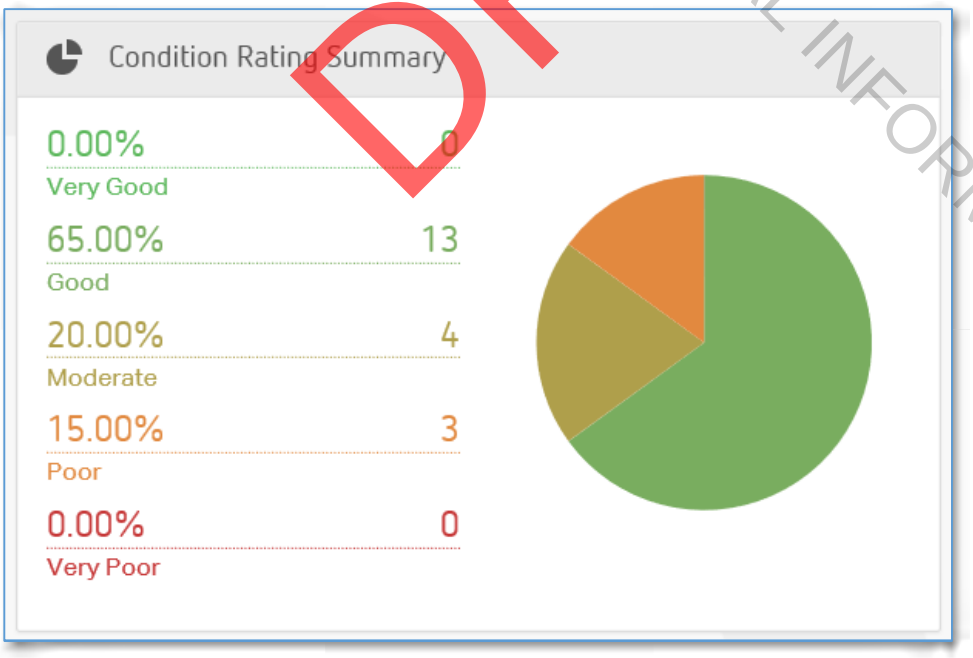

Figure 39 *Building 7 Condition of Exterior Elevations*

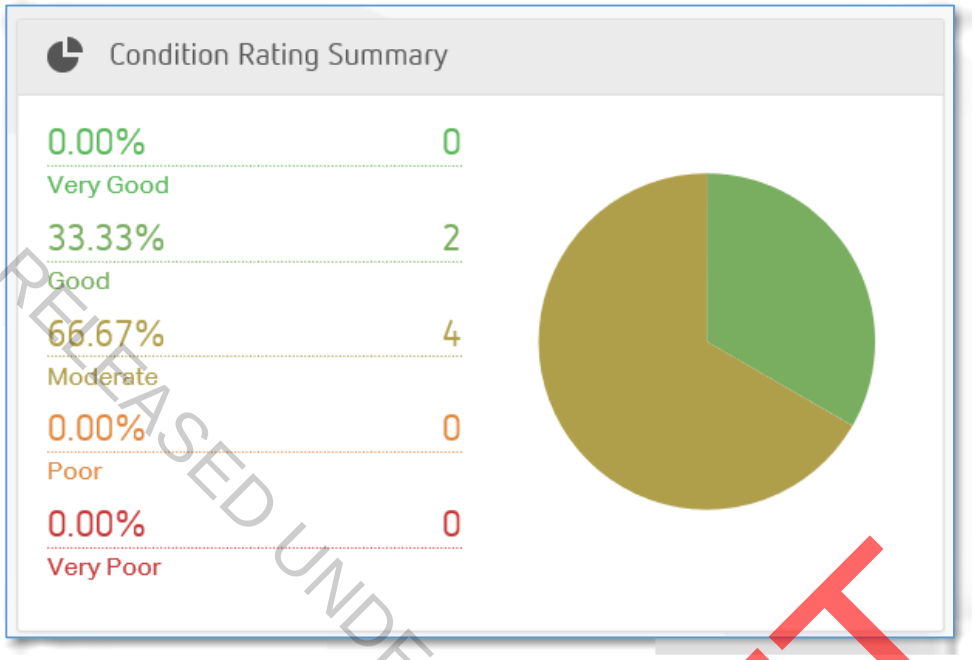

Figure 40 Building 7 Condition of Roof

10.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Blocked gutters
- Issues with roof flashings

10.2 Mechanical Services

10.2.1 Heating Plant

Building 7 houses the central heating plant for the Hillmorton Hospital campus and supplies the site-reticulated heating hot water for calorifier and comfort heating for most of the buildings on the site.

Heating is provided by two boilers. The Binder wood chip boiler is equipped with particulate emission controls to meet the resource consent particulate discharge requirements. The other Hoval boiler is LPG-fired. The energy centre also houses associated plant: pumps, expansion tanks, buffer tank.

The energy centre was refurbished with the installation of the wood chip boiler and has been in service approximately six years of an expected twenty year service life.

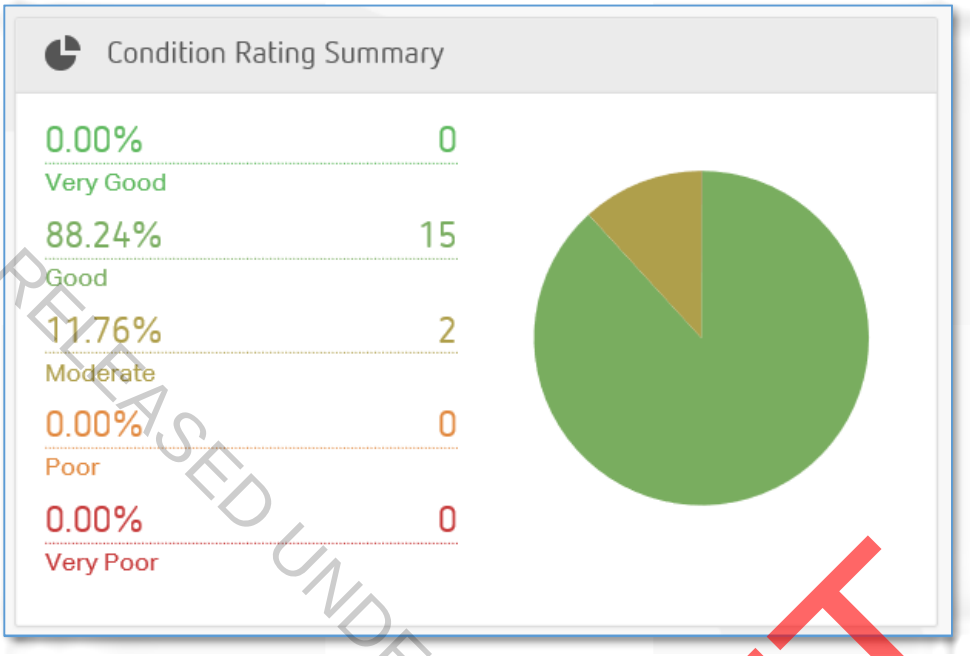

Figure 41 Building 7 Condition of Mechanical Services

10.2.2 Recommendation

The Energy Centre mechanical plant appears to be well maintained to achieve its expected service life.

10.3 Electrical Systems

10.3.1 Main Switchboard

The main switchboard for Building 7 is situated in the Boiler Plant Room. It is in good condition with modern switchgear and equipment.

10.3.2 Generator

The generator and the associated controls panel are in good condition.

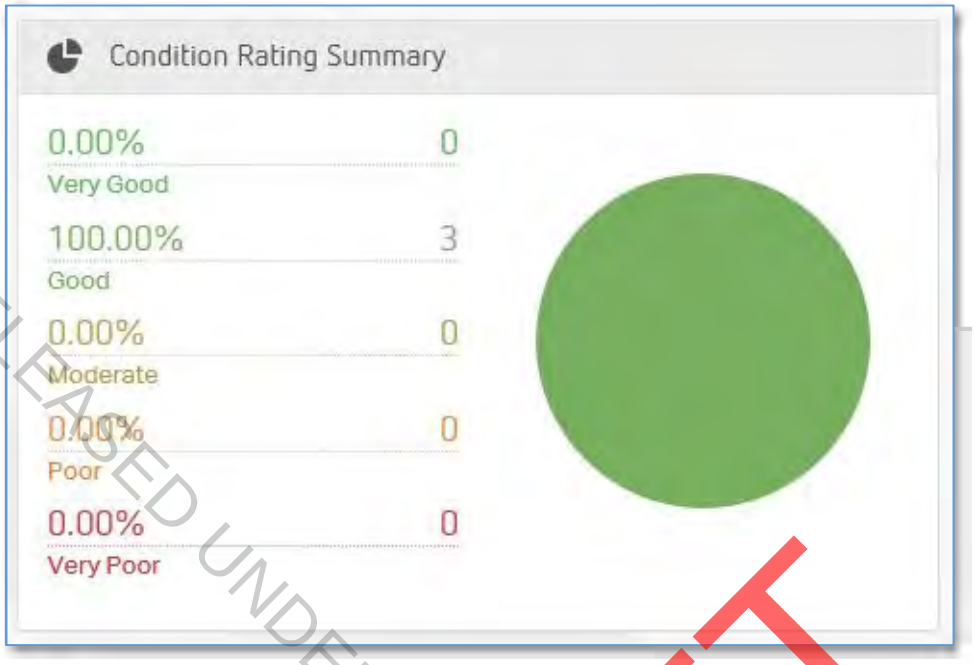

Figure 42 Building 7 Condition of Electrical Services

10.3.3 Recommendations

The main switchboard should be replaced in 15-20 years.

11 Building 8 Tupuna Village

11.1 General

The building was constructed in 1971. It is timber framed with brick veneer and profiled metal cladding systems and has a corrugated iron roof. The building has predominantly timber framed windows.

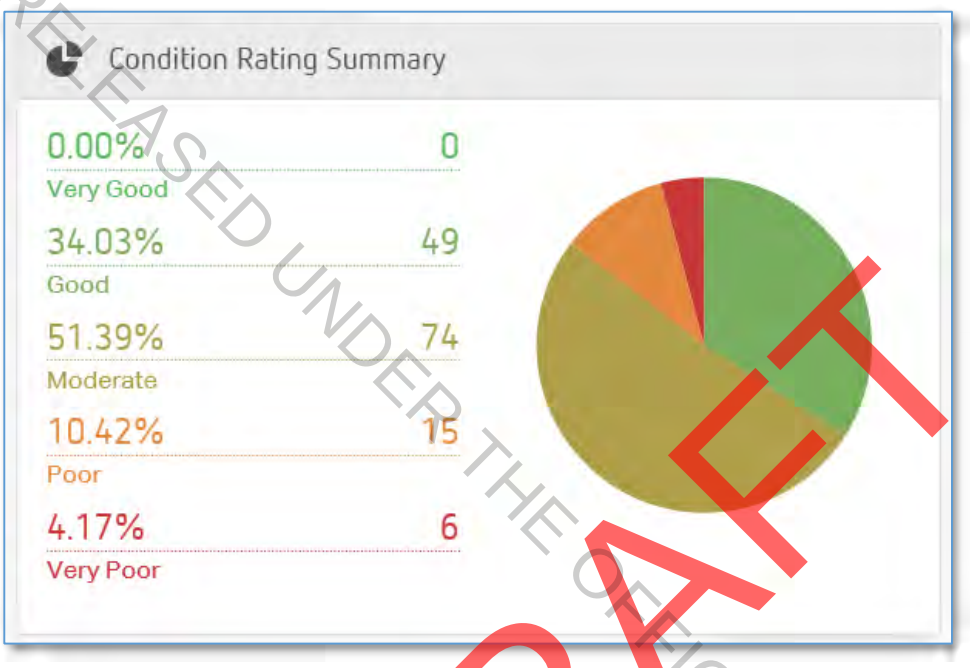

Figure 43 *Building 6 Overall Condition*

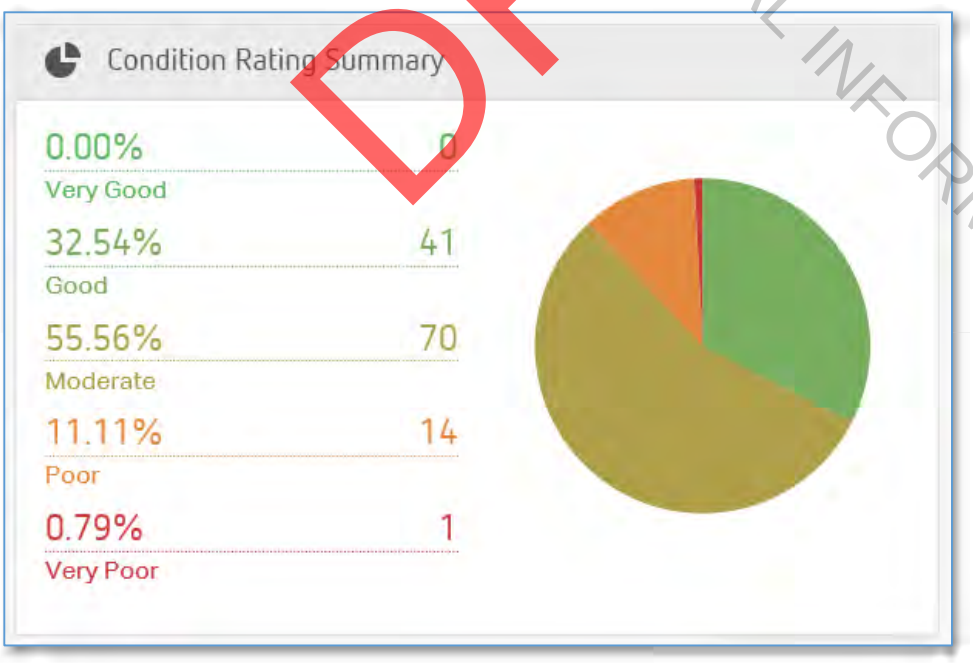

Figure 44 *Building 8 Condition of Exterior Elevations*

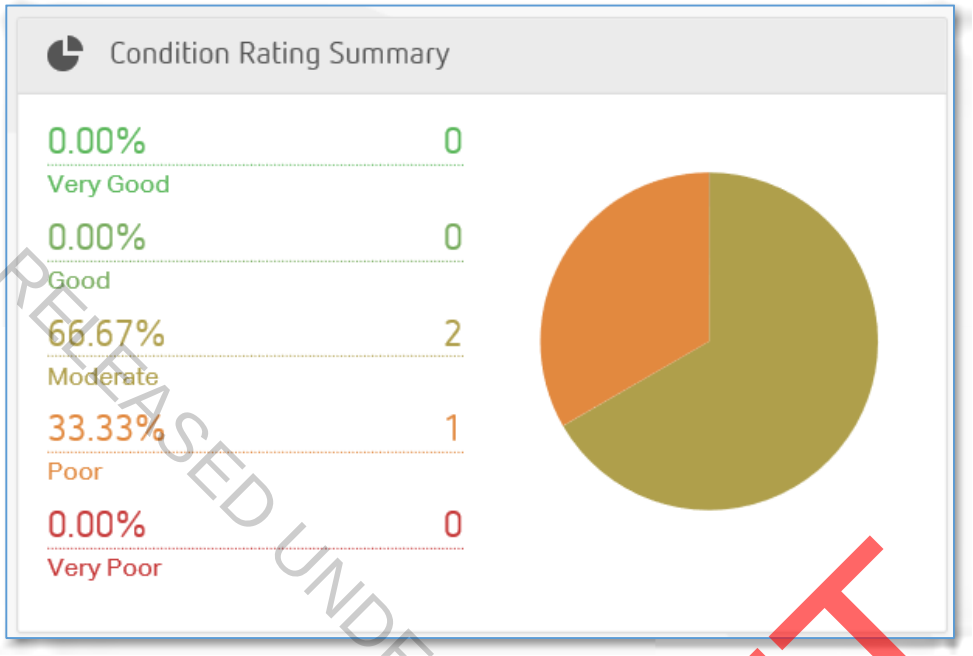

Figure 45 Building 8 Condition of Roof

11.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Evidence of leaks around ridge having been repaired. Noted that the ridge flashing to the east side has been replaced. Given the issues found on buildings 3, 4 and 5 it is safe to assume that the sheet ends under the ridge are starting to rust.
- Various patch repairs evident on roof
- External door rotten

11.2 Mechanical Services

11.2.1 Heating Plant

The heating plant for Building 8 is situated in Calorifier Room G023.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

Site reticulated heating water is circulated through a shell and tube heat exchanger to generate low temperature heating water for the building comfort heating and domestic hot water. Heating water is pumped to radiators through the building. A domestic hot water pump circulates domestic hot water through a loop to supply the building.

The mechanical plant generally including the heat exchanger, and the calorifier are in the second half of their service life and will exhibit increasing maintenance costs over the next ten years. The mechanical control panel is original building equipment and should be replaced along with other electrical boards. One valve actuator has been removed and appears to require maintenance.

The pumps appear to have been replaced recently and should have more than ten years expected service life remaining.

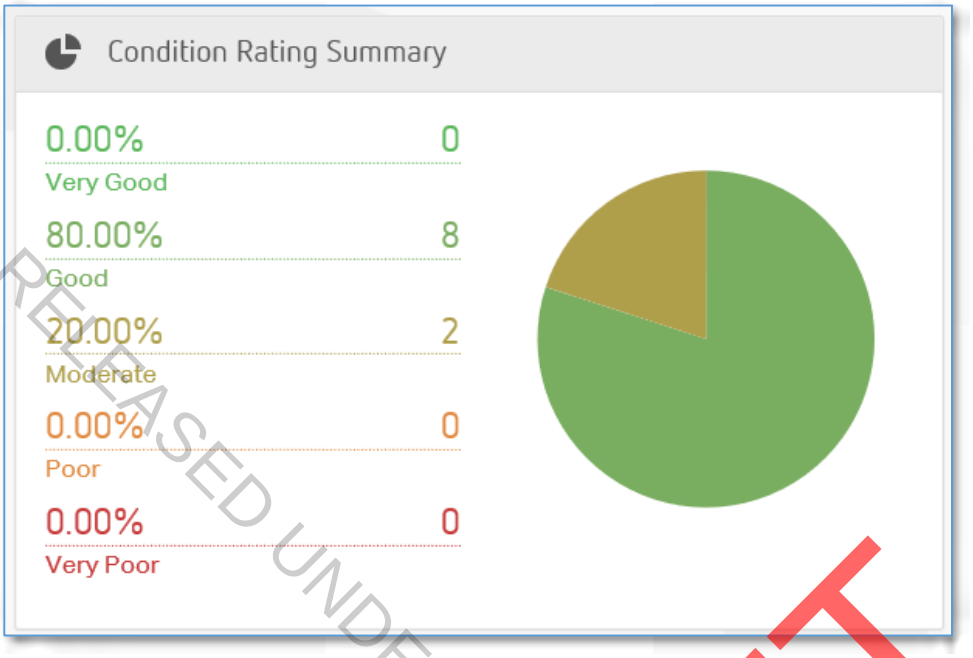

Figure 46 Building 8 Condition of Mechanical Systems

11.2.2 Recommendation

The mechanical plant, calorifier, heat exchanger and LTHW pump are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five

year time frame.

The mechanical control panel should be replaced along with other electrical boards.

The pumps and control valves are in the first half of their service life and should have an expected remaining service life of over ten years.

11.3 Electrical Systems

11.3.1 Main Switchboard

The main switchboard for Building 8 is situated in the Switchboard Room. Although in good condition, the main switchboard is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, aging switchgear and equipment are inefficient and potentially dangerous.

11.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls board servicing the building are of the same age as the main switchboard and similarly, replacements should be considered.

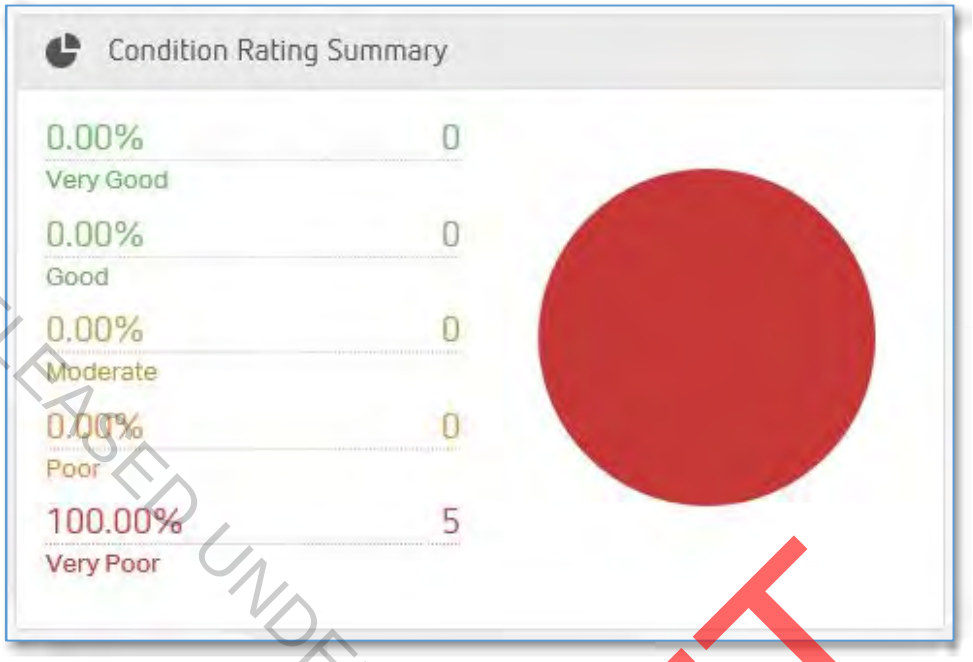

Figure 47 Building 8 Condition of Electrical Systems

11.3.3 Recommendations

The main switchboard, distribution switchboards and mechanical controls board be replaced within 5 years.

12 Building 9 Recreation Centre

12.1 General

The building was constructed in 1974. It is timber framed with a brick veneer cladding system and has a corrugated iron roof. The building has predominantly timber framed windows.

The overall condition of the building is rated at 2.9.

Figure 48 *Building 9 Overall Condition*

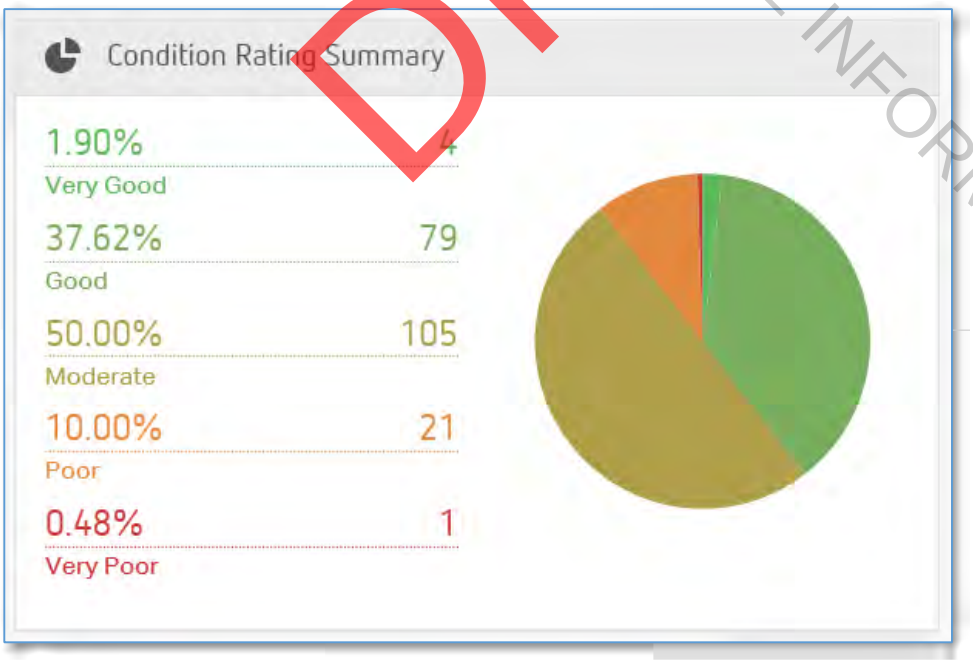

Figure 49 *Building 9 Condition of Exterior Elevations*

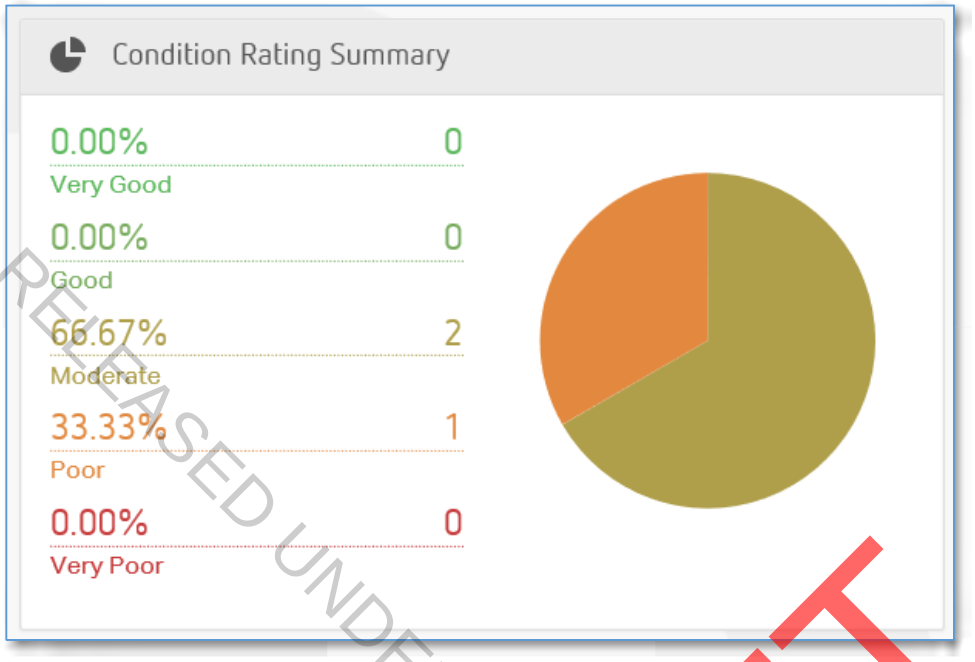

Figure 50 Building 9 Condition of Roof

12.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Areas of roof paint in very poor condition
- Downpipes in poor condition
- Internal gutters draining to flat roofing appears to be the cause of roof leaks

12.2 Mechanical Services

12.2.1 Heating Plant

The heating plant for Building 9 is situated in Calorifier Room C061. The plant room is within the building but the concrete floor is below grade.

The building is supplied with site-reticulated heating hot water for comfort heating.

Site reticulated heating water is circulated through a plate heat exchanger to generate low temperature heating water for the building comfort heating. Heating water is pumped to radiators through the building.

The mechanical plant generally including the pumps and the heat exchanger are in the first half of their service life and should have more than ten years expected service life remaining.

The mechanical control panel is of an age that it should be replaced when other electrical work is scheduled for the building.

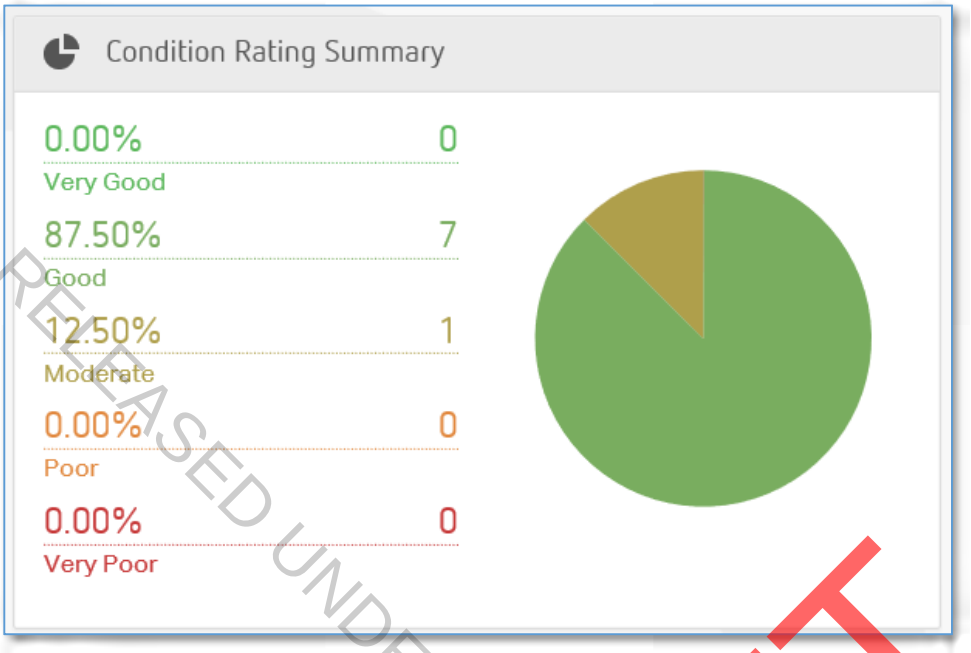

Figure 51 *Building 9 Condition of Mechanical Systems*

12.2.2 Recommendation

The mechanical plant, heat exchanger and the pumps and control valves are in the first half of their service life and should have an expected remaining service life of over ten years.

The mechanical control panel replacement should be scheduled for within a five year time frame.

12.3 Electrical Systems

12.3.1 Main Switchboard

The main switchboard for Building 9 is situated in the Switchboard Room. The main switchboard consists of old panels with modern switchgear and equipment, which are in moderate condition.

12.3.2 Distribution Switchboards

The distribution switchboard in corridor G026 and the mechanical controls board in the Plant Room are in good condition.

The distribution switchboards in the Main Room G027 has an assortment of switchgear and equipment which vary in age, make and condition. Overall, the distribution switchboard is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, aging switchgear and equipment are inefficient and potentially dangerous.

The distribution switchboard in the Kitchen consists of old panels in moderate to poor condition.

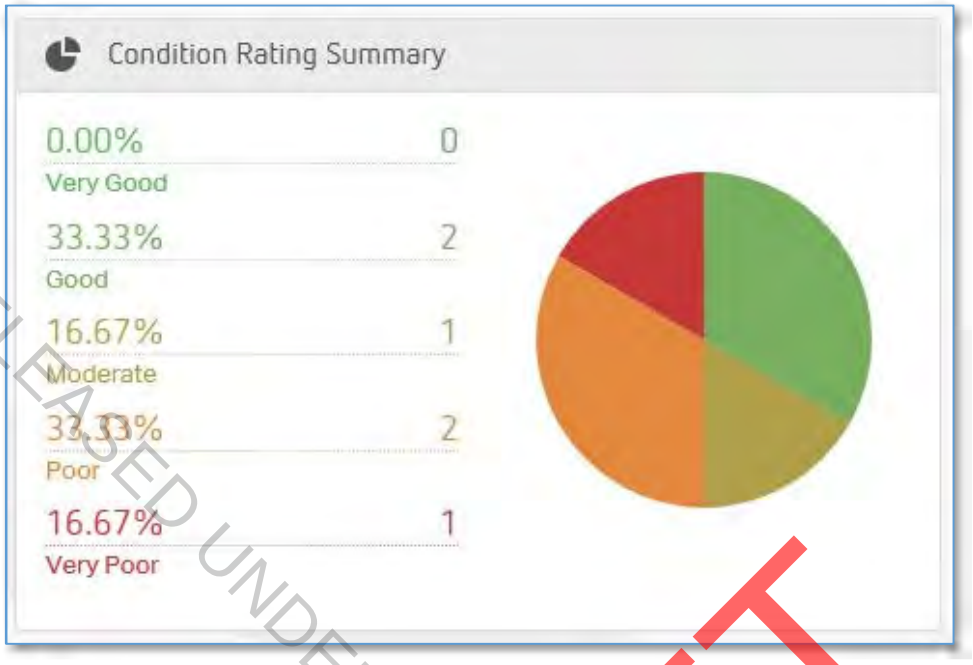

Figure 52 Building 9 Condition of Electrical Systems

12.3.3 Recommendations

- The main switchboard and the distribution switchboard in the Kitchen be replaced in 5-10 years.
- The distribution switchboard in the Main Room G027 be replaced within 5 years.
- The distribution switchboard in Corridor G026 and the mechanical controls board in the Plant Room be replaced in 15-20 years.

13 Building 10 Kiwi Kids Nursery

13.1 General

The building was constructed around the year 1970. It is timber framed with brick veneer and light-weight cladding systems and has a corrugated iron roof. The building has predominantly timber framed windows.

The overall condition of the building is rated at 2.7.

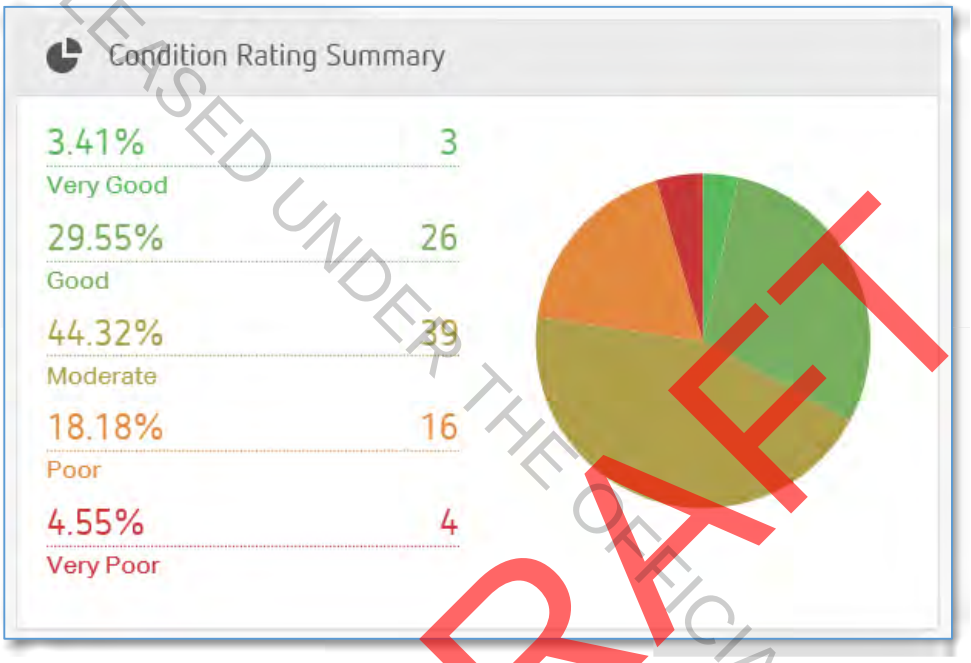

Figure 53 Building 10 Overall Condition

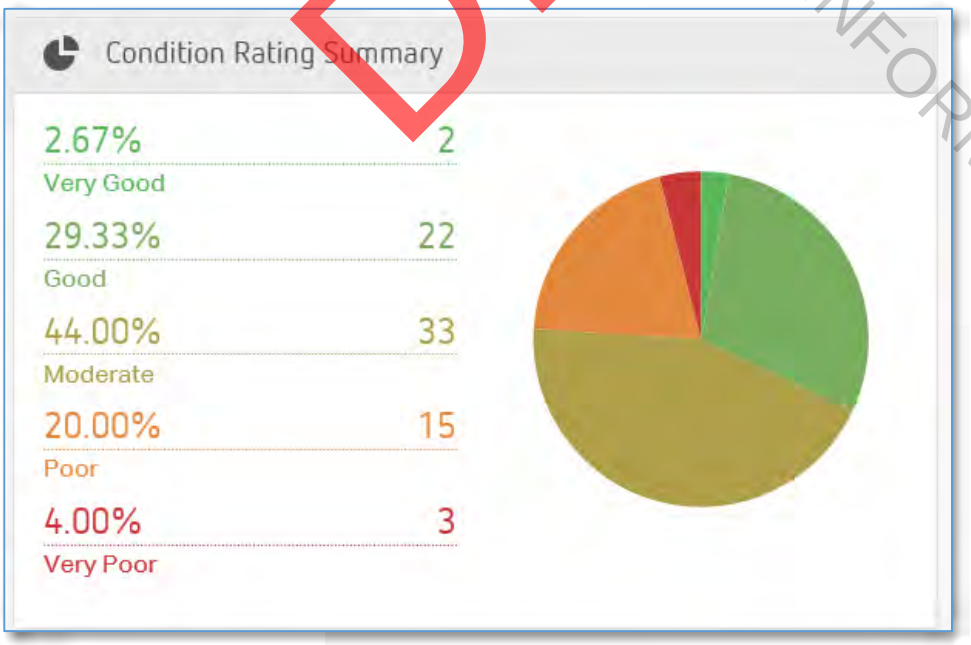

Figure 54 Building 10 Condition of Exterior Elevations

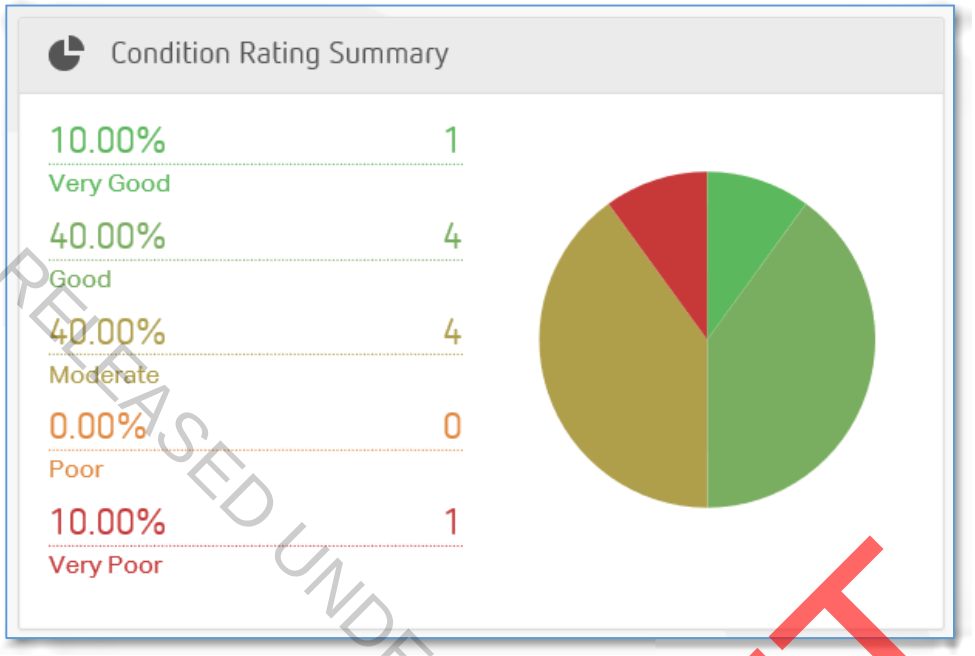

Figure 55 Building 10 Condition of Roof

13.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Patio/Gardens blocking underfloor vents
- Some rot in timber windows
- Shade roof structure appears to be inadequately built
- Step cracks and failed pointing in brickwork, some displaced bricks
- Paint flaking off possible asbestos panels
- Deck boards failed

13.2 Mechanical Services

13.2.1 Heating Plant

The heating plant for Building 10 is provided by spilt system heat pumps with natural ventilation via opening windows.

There is no mechanical plant room for this facility.

13.2.2 Recommendation

The split system heat pumps are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame.

13.3 Electrical Systems

13.3.1 Main Switchboard

The main switchboard for Building 10 is situated in the Laundry. It consists of modern switchgear and equipment but is in moderate to poor condition. One half on the switchboard bi-fold doors is absent.

13.3.2 Distribution Switchboard

The distribution switchboard servicing the building consists of modern switchgear and equipment, which is in moderate condition.

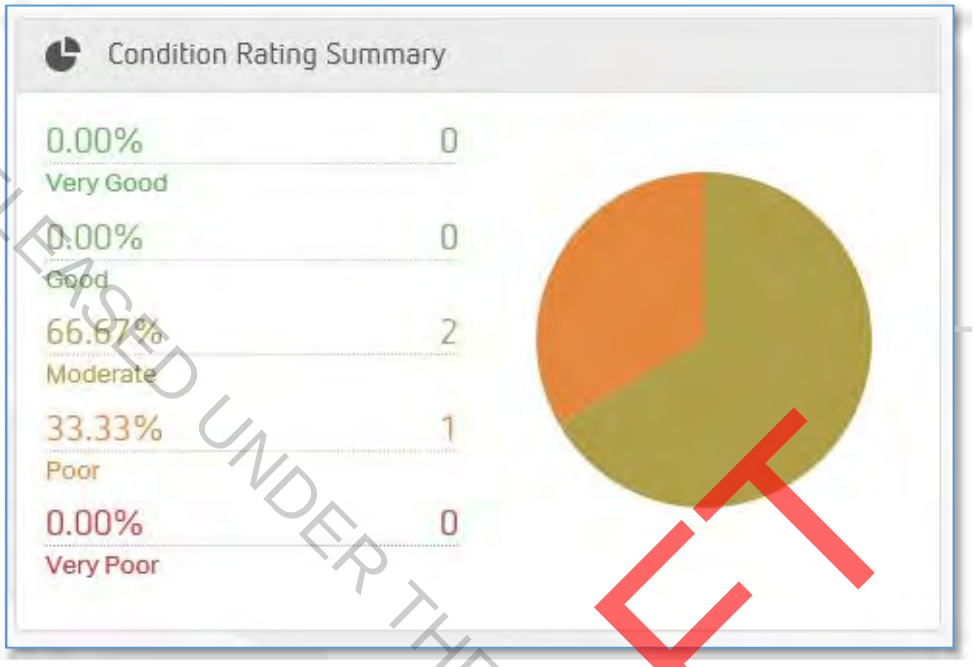

Figure 56 Building 10 Condition of Electrical Sysyems

13.3.3 Recommendations

The main switchboard and distribution switchboard be replaced in 10-15 years.

14 Building 13 Meeting Rooms

14.1 General

The building was constructed around 2011/12. It is timber framed with weatherboard cladding and has a corrugated iron roof. The building has predominantly aluminium framed windows.

The overall condition of the building is rate at 1.6.

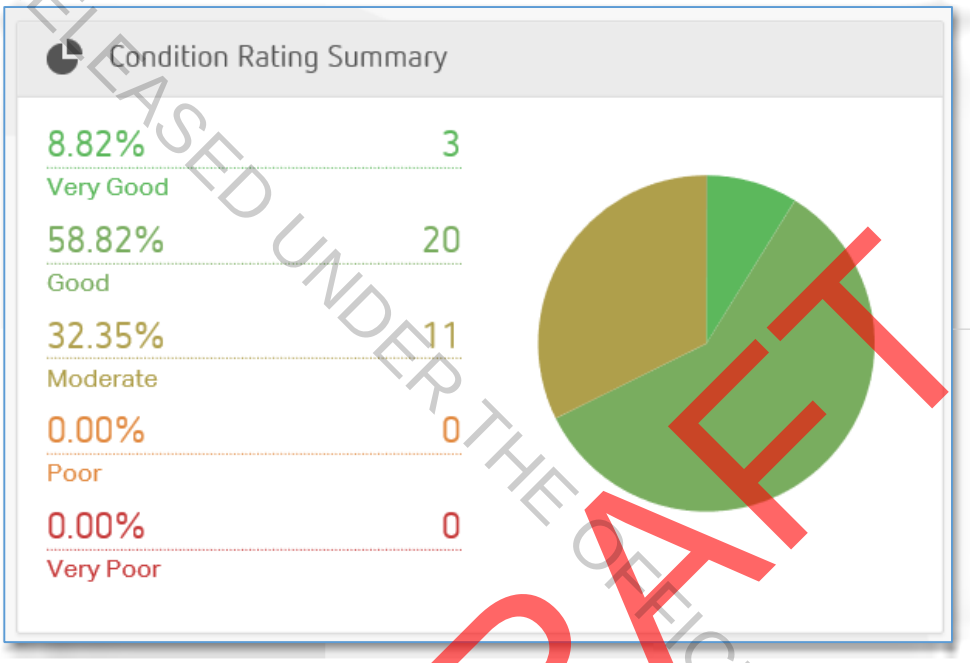

Figure 57 *Building 13 Overall Condition*

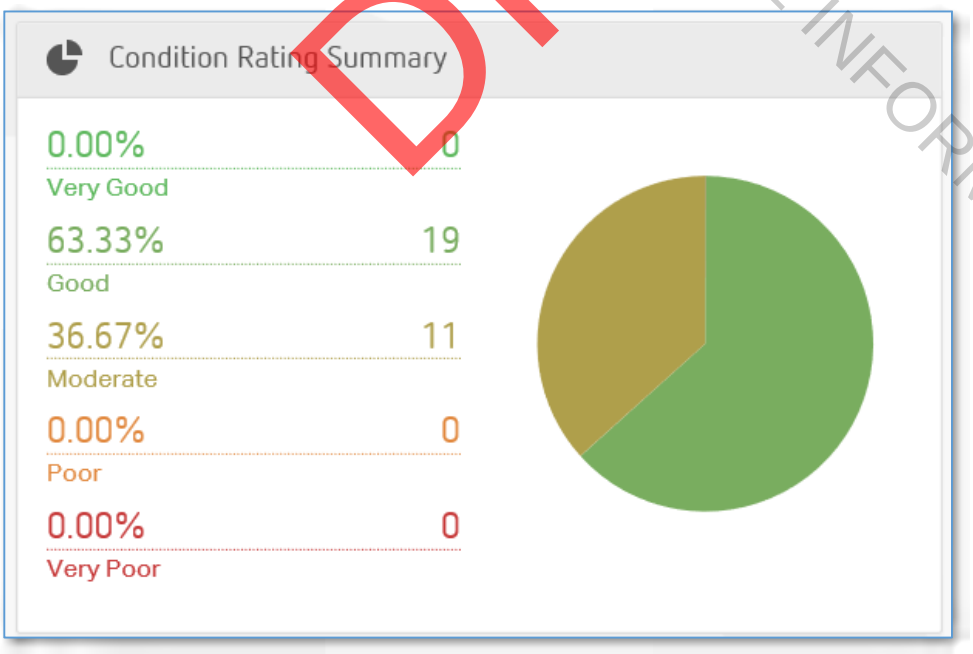

Figure 58 *Building 13 Condition of Exterior Elevations*

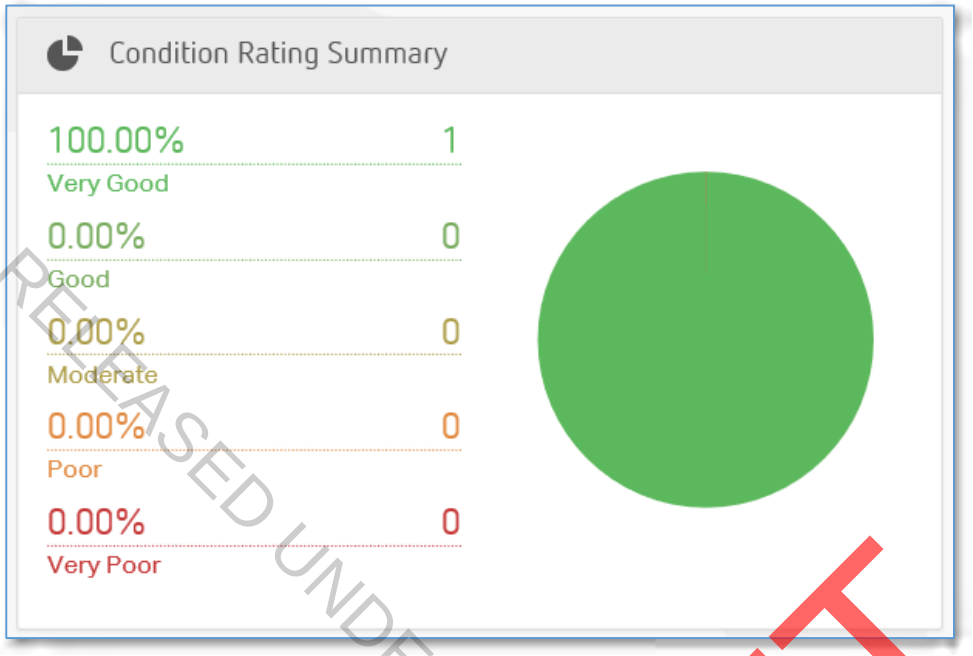

Figure 59 Building 13 Condition of Roof

14.1.1 Remedial Works

No specific deferred maintenance items were noted during the survey.

14.2 Mechanical Services

14.2.1 Heating Plant

The heating plant for Building 13, Meeting Rooms 3 and 4 is provided by split system heat pumps with natural ventilation via opening windows.

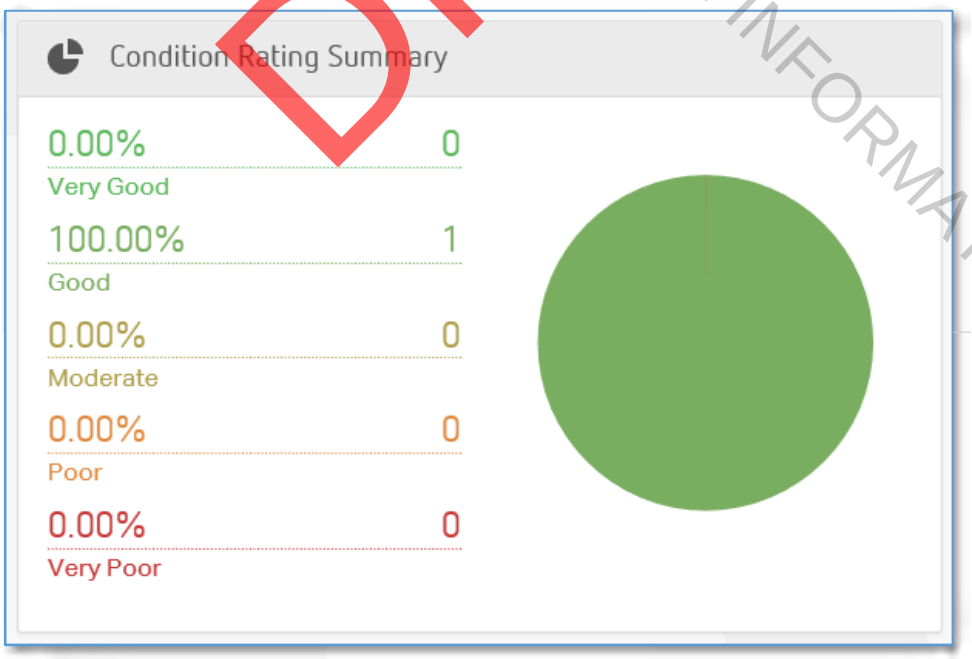

Figure 60 *Building 13 Condition of Mechanical Systems*

14.2.2 Recommendation

The split system heat pumps are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame.

14.3 Electrical Systems

14.3.1 Distribution Switchboards

The distribution switchboards servicing Meeting Rooms 3 and 4 in building 13 are in good condition with modern switchgear and equipment.

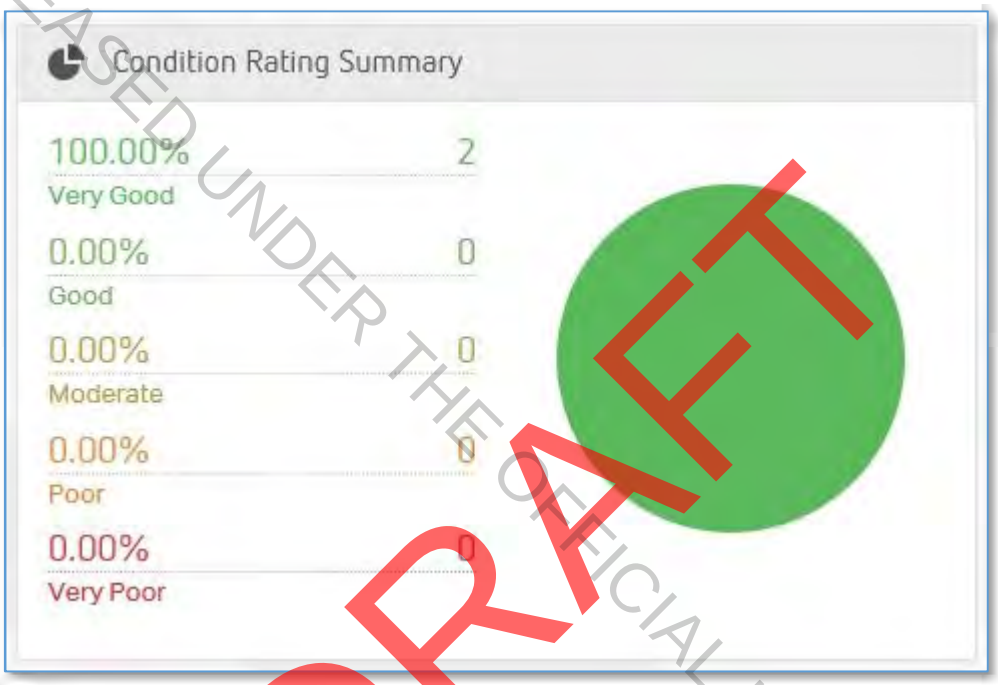

Figure 61 *Building 13 Condition of Electrical Systems*

14.3.2 Recommendations

The distribution switchboards be replaced in 15-20 years.

15 Building 15 Fergusson Building

15.1 General

The building was constructed in 1960. It is a combination of reinforced concrete and block and timber frame with pre-cast concrete panel and plastered blockwork cladding systems and has a corrugated aluminium sheet roof. Modifications/extensions were made to the building around the years 2013 and 2014. The building has predominantly timber and aluminium framed windows.

The overall condition of the building is rated at 2.9.

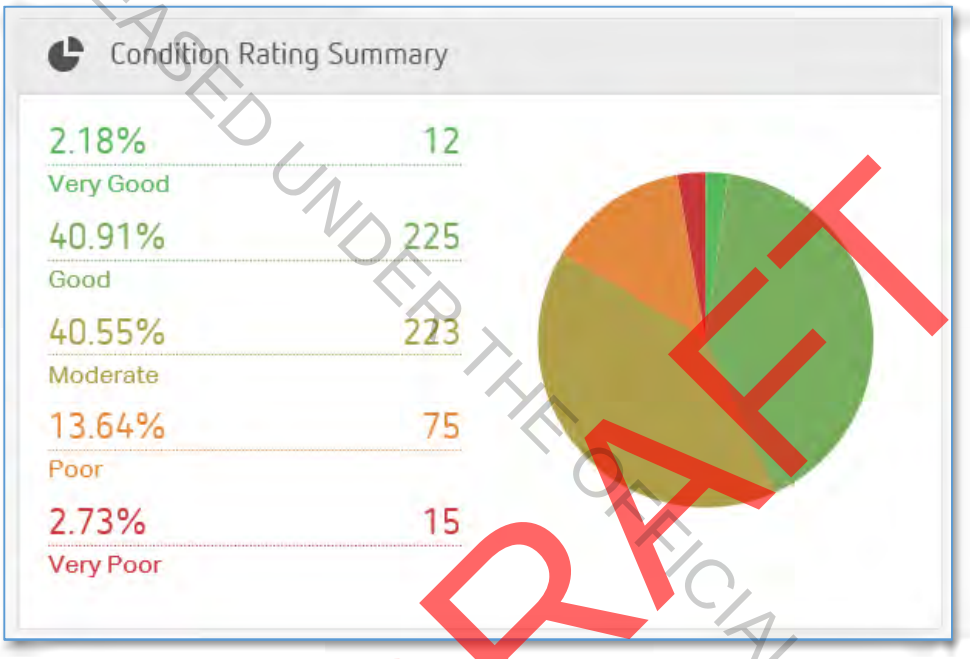

Figure 62 Building 10 Overall Condition

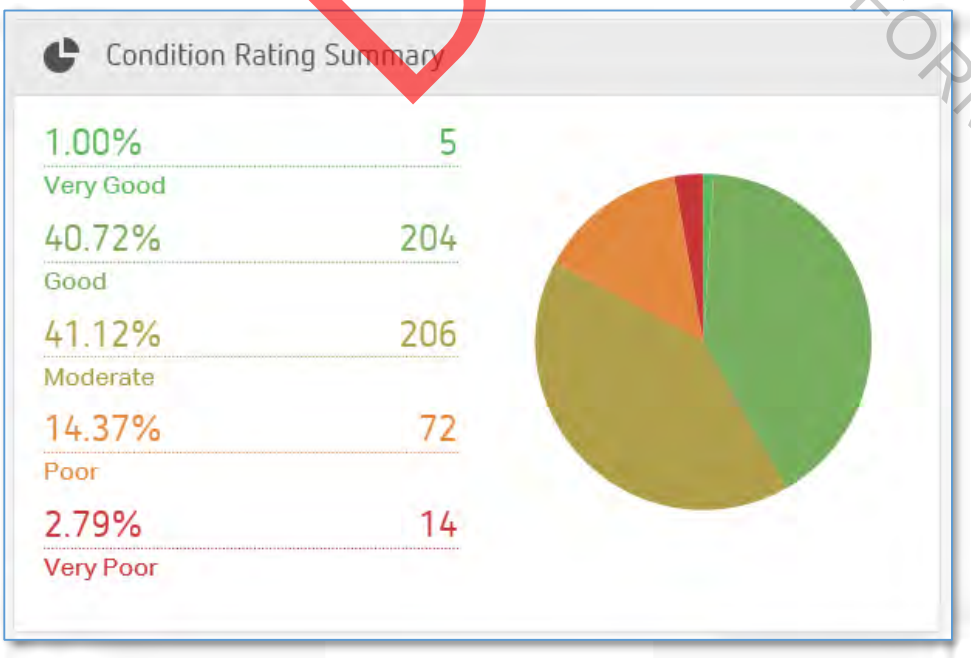

Figure 63 Building 10 Condition of Exterior Elevations

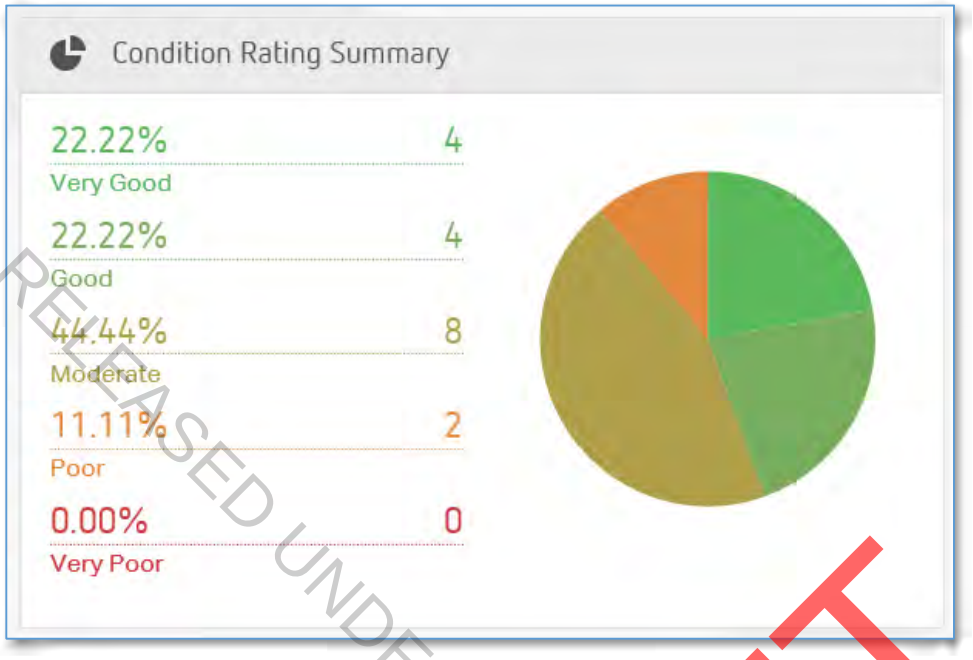

Figure 64 Building 10 Condition of Roof

15.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Suspect roof sheeting rusting beneath ridge flashing
- Loose electrical cabling on roof
- Skylights deteriorated and leaking
- Gutters require cleaning
- Butanol patch repairs to roof evidence of roof leaks.
- Evidence of tree roots lifting pavers and subsidence
- Suspected asbestos cladding
- Dry rot noted in window cills
- Roof sheeting lifting
- Windows require repainting

15.2 Mechanical Services

15.2.1 Heating Plant

The heating plant for Building 15 is situated in B001 basement plant room.

The building is supplied with site-reticulated heating hot water for calorifier and comfort heating.

Site reticulated heating water is circulated through a plate heat exchanger to generate low temperature heating water for the building comfort heating and domestic hot water. Heating water is pumped to four heating zones throughout the building.

The mechanical heating plant is generally in good condition, much of it appearing to have been retrofitted recently and while the calorifiers are in the second half of their service life the remaining service life of the facility would be a minimum of ten years.

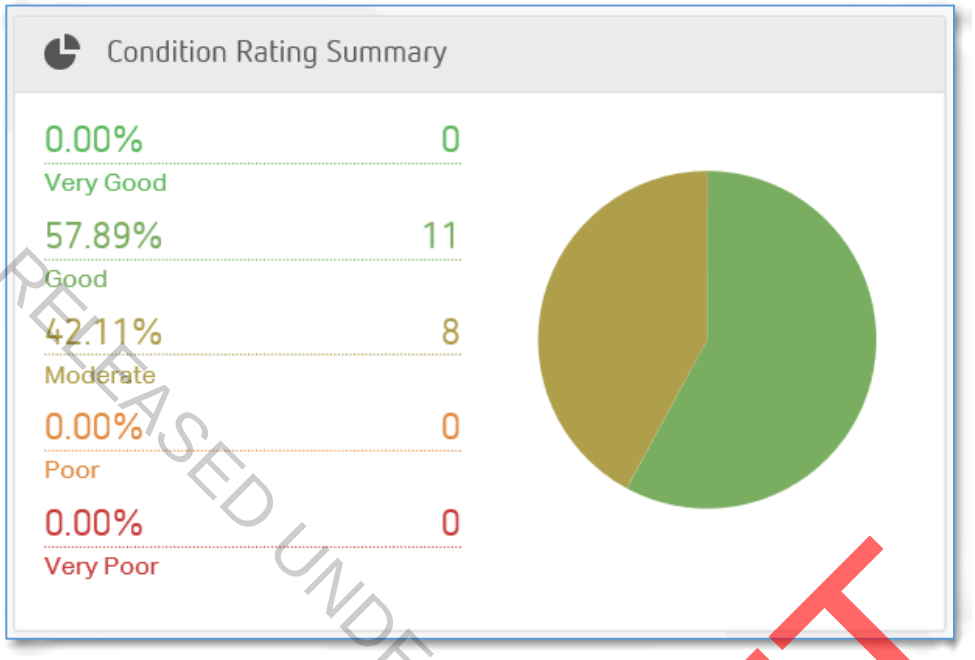

Figure 65 Building 9 Condition of Mechanical Systems

15.2.2 Chiller and Ventilation Plant

Plant room G010 for Building 15 contains a chiller and associated pumps to supply cooling coils for air handling units located at level 1 above G010.

Both the chiller and the air handling plant are past the end of their useful service life.

15.2.3 Recommendation

The chiller, chilled water pumps and the air handling plant are at the end of their service life and should be monitored closely for deteriorating performance and replacement should be planned.

15.3 Electrical Systems

15.3.1 Main Switchboard

The main switchboard for Building 15 is situated in the Basement Plant Room. The board is in very good condition with modern switchgear and equipment.

15.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls boards servicing Building 15 vary from very good to good condition with modern switchgear and equipment. The solitary exception is the mechanical controls board in Plant Room G010. The board is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, ageing switchgear and equipment are inefficient and potentially dangerous.

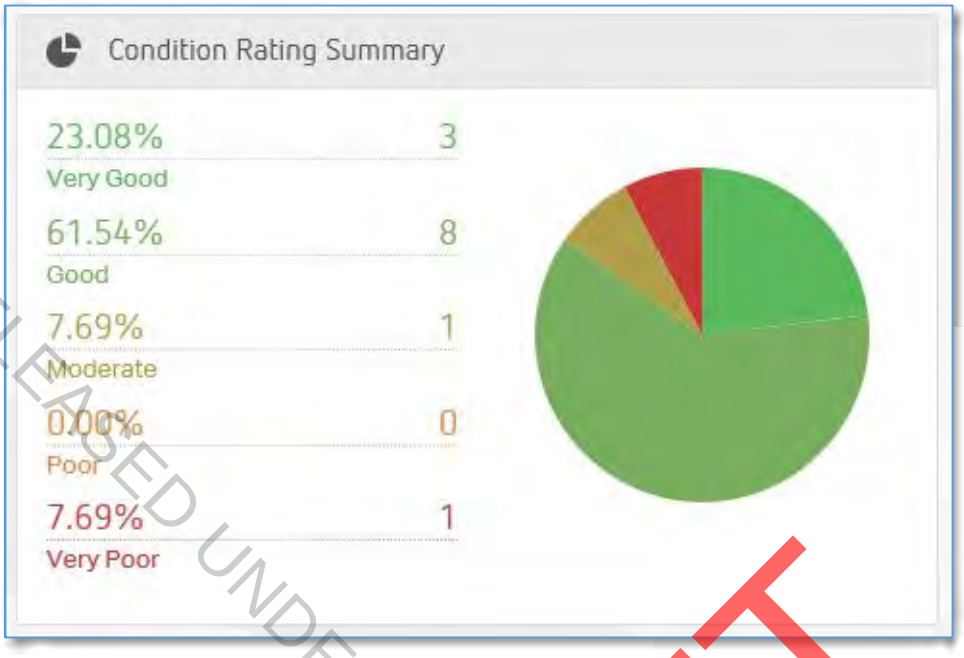

Figure 66 Building 9 Condition of Electrical Systems

15.3.3 Recommendations

- The main switchboard and the distribution switchboards be replaced in 15-25 years.
- The mechanical controls board in Plant Room G010 be replaced within 5 years.

16 Building 16 Community Dental Service

16.1 General

The building was constructed in 2010. It is timber framed with a combination of Linea board, Hardiflex and Shadowclad cladding systems and has a long-run iron roof. The building has predominantly aluminium framed windows.

The overall condition of the building is rated at 1.5.

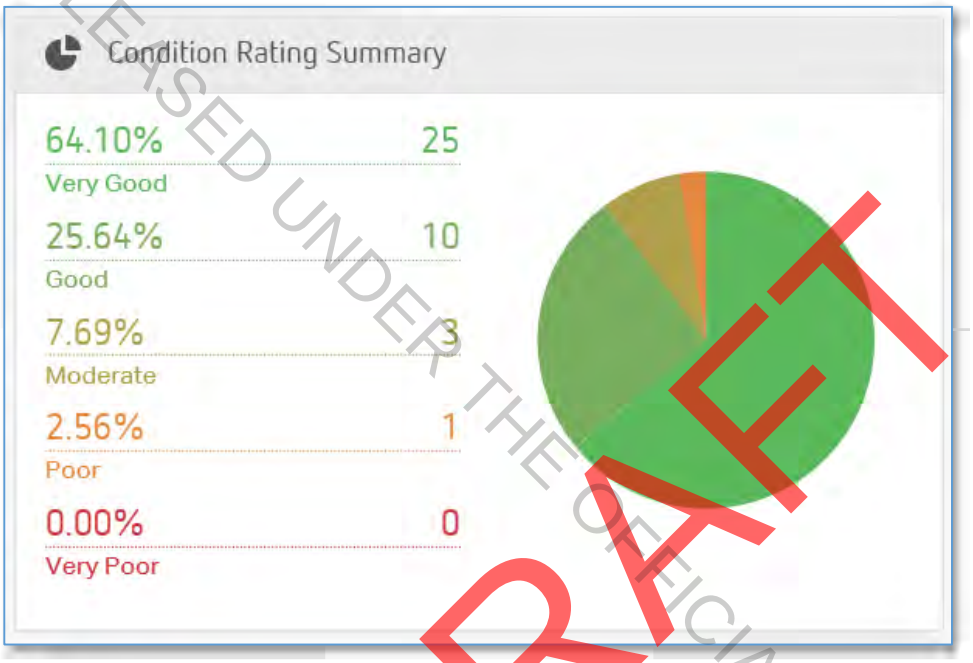

Figure 67 *Building 16 Overall Building Condition*

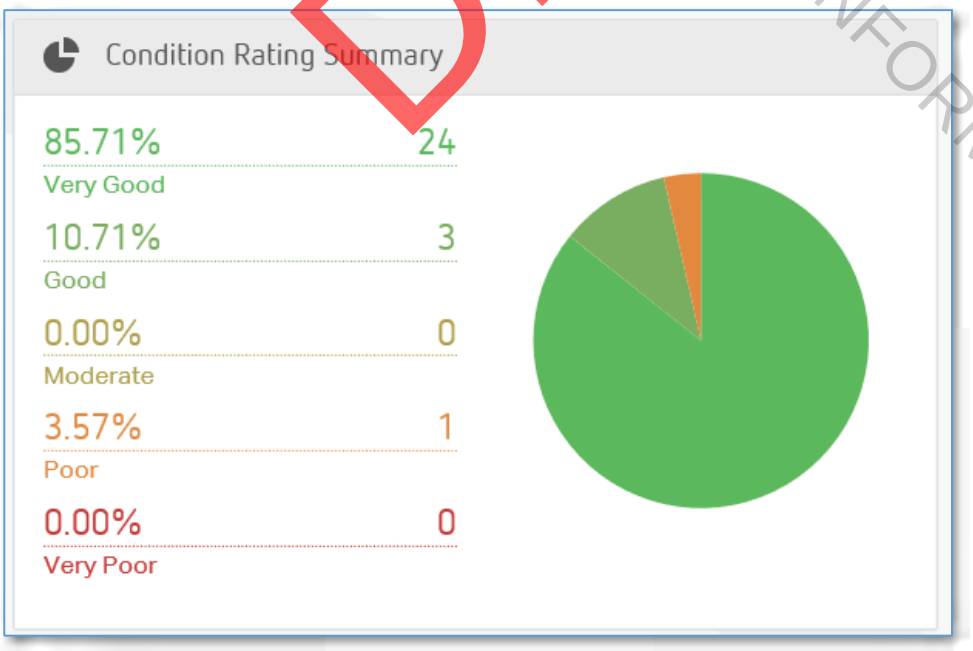

Figure 68 *Building 16 Condition of Exterior Elevations*

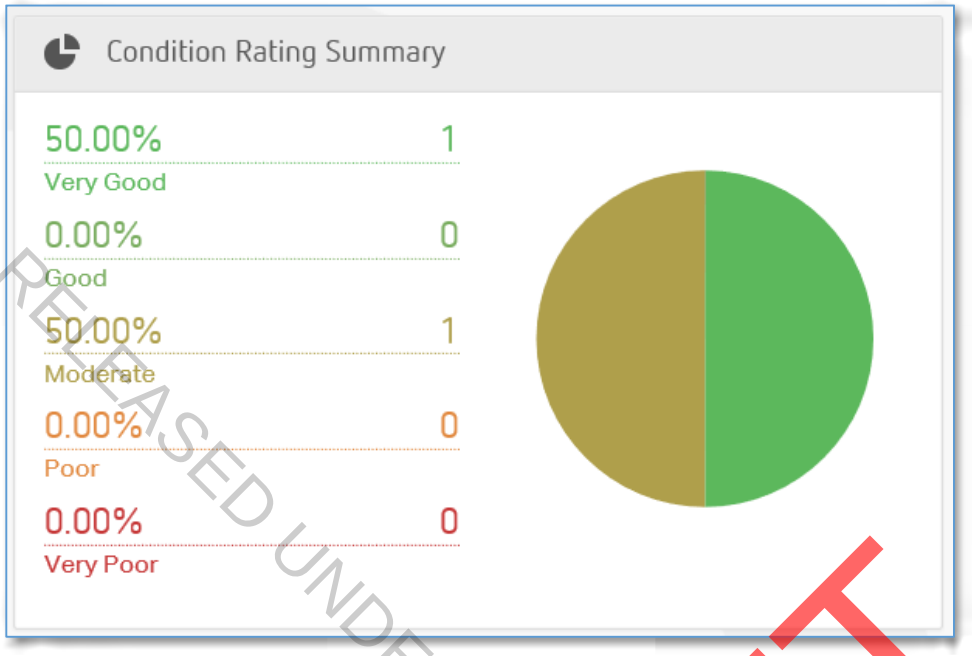

Figure 69 Building 16 Condition of Roof

16.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Failure of sealants on cladding
- Damage to barge boards

16.2 Mechanical Services

16.2.1 Heating Plant

The heating plant for Building 16 is provided by split system heat pumps with natural ventilation via opening windows with some spaces extracted.

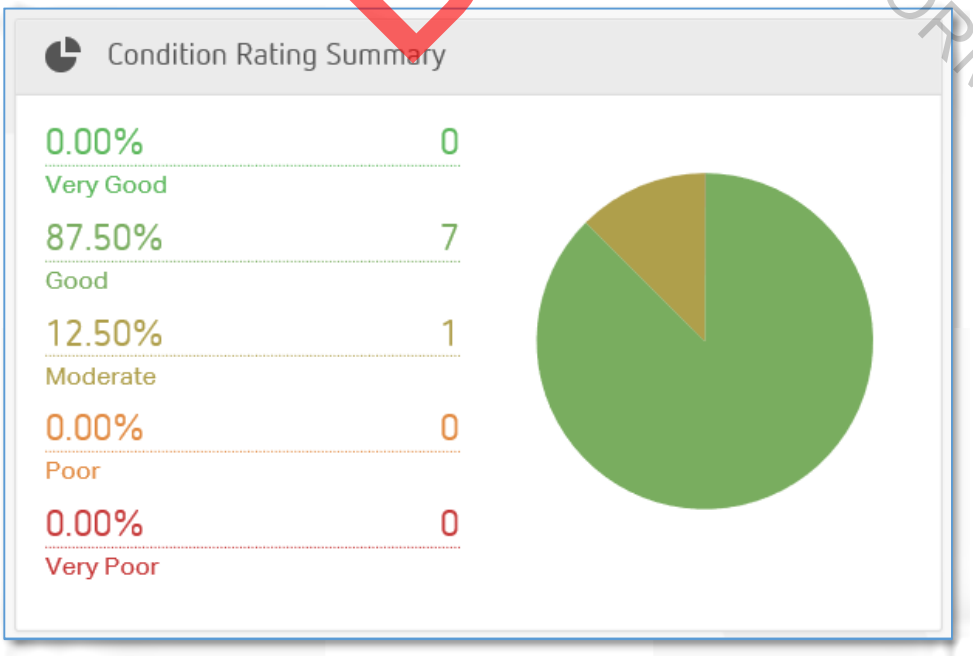

Figure 70 Building 16 Condition of Mechanical Systems

16.2.2 Recommendation

The split system heat pumps are in the second half of service life and should be monitored closely for deteriorating performance and replacement should be planned for within a five year time frame.

16.3 Electrical Systems

16.3.1 Main Switchboard

The main switchboard for Building 16 is situated in the Plant Room. It is in good condition with modern switchgear and equipment.

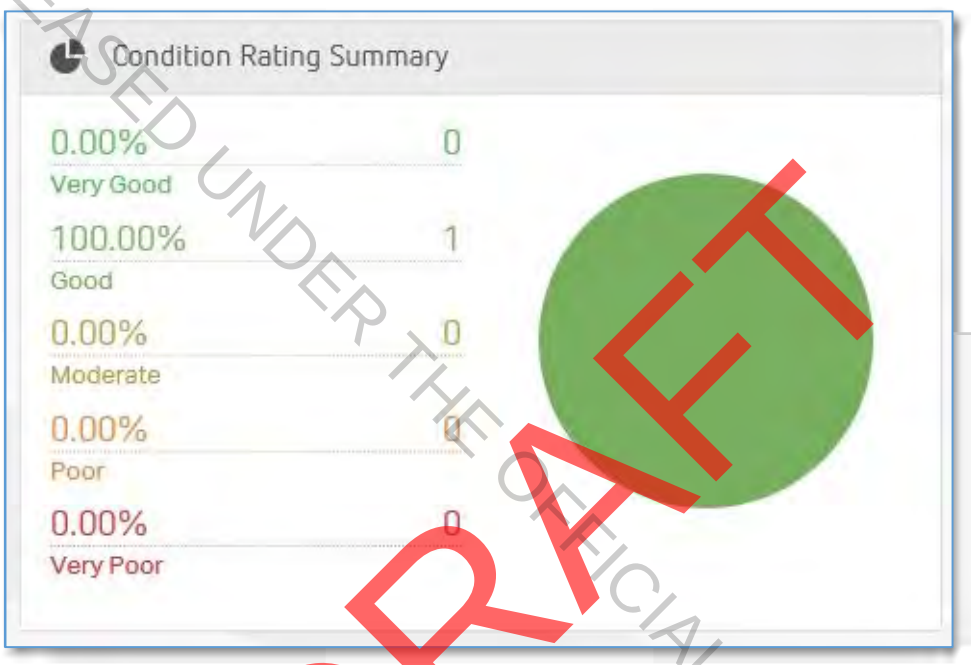

Figure 71 Building 16 Condition of Electrical Systems

16.3.2 Recommendations

The main switchboard be replaced in 15-20 years.

17 Building 21 Training Unit, Library

17.1 General

The building was constructed in 1964. It is reinforced concrete and timber framed with a reinforced concrete cladding system and has a galvanised iron roof. The building has predominantly timber and aluminium windows.

The overall condition of the building is rated at 3.2.

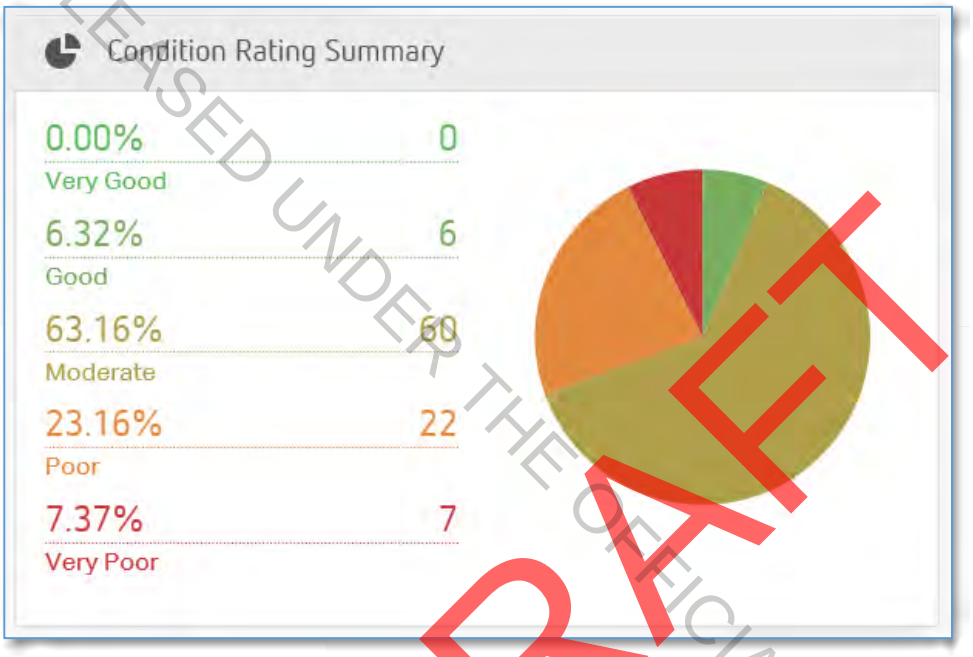

Figure 72 Building 21 Overall Building Condition

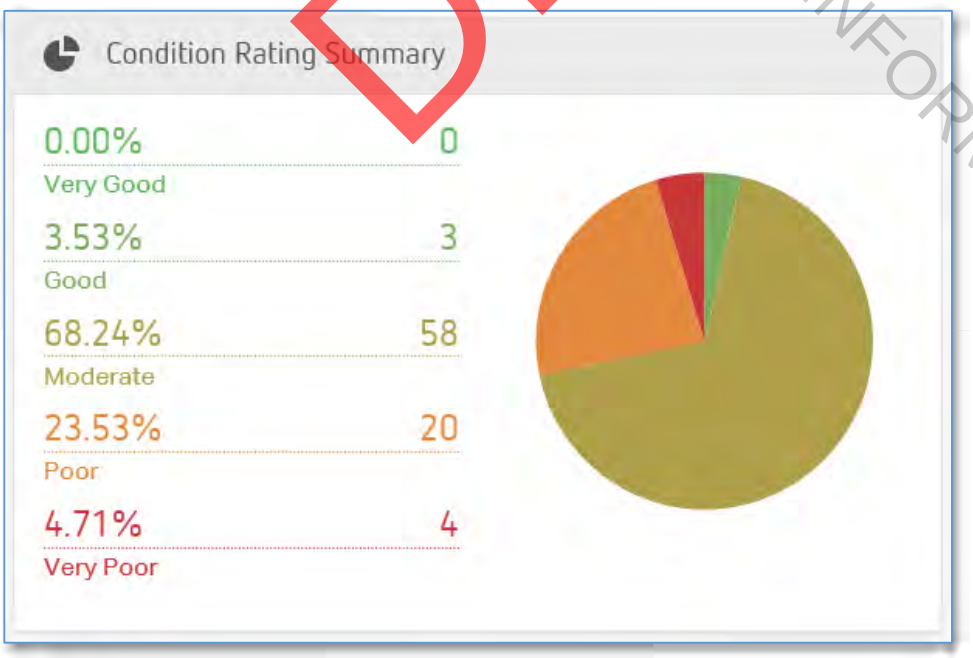

Figure 73 Building 21 Condition of Exterior Elevations

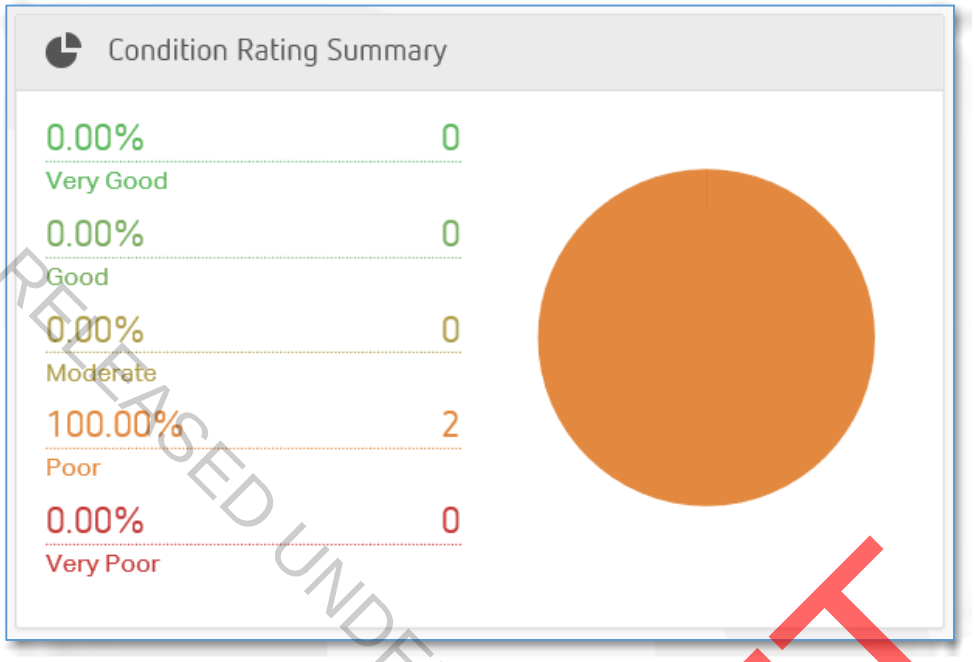

Figure 74 Building 21 Condition of Roof

17.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Heavy build-up of tree debris next to building
- Cladding paint peeling
- Downpipes in poor condition
- Cracks noted in soffits
- Rot in timber flashings around windows

17.2 Mechanical Services

17.2.1 Heating Plant

The heating plant for Building 21 is situated in G003 Calorifier Room. The system includes a modern condensing gas boiler supplying heating hot water, replacing site-reticulated heating water as the energy source. The boiler, expansion tank and circulation pump for comfort heating have been retrofitted in recent years and are in the first half of their service lives. The switchboard/control panel which includes pump control is at the end of its service life.

Domestic hot water is generated in an electric storage cylinder located in the cleaners' room G020. This is nearing the end of its service life and should be scheduled for replacement.

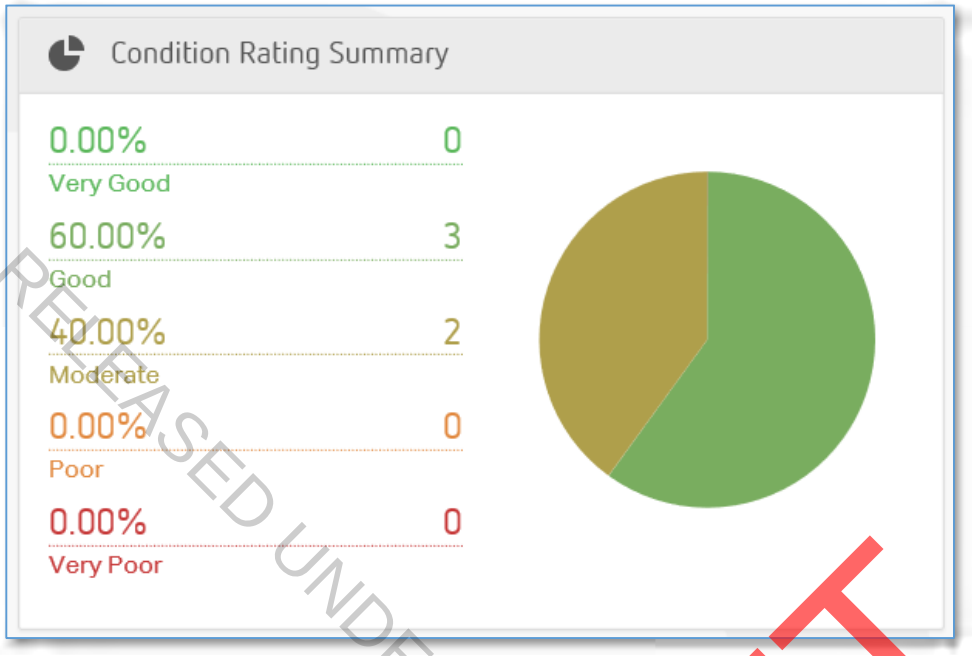

Figure 75 Building 21 Condition of Mechanical Systems

17.2.2 Recommendation

The mechanical controls should be replaced when the switchboard is replaced in five years. The hot water cylinder should be replaced within a similar time frame.

The boiler, expansion tank and circulation pump should have an expected remaining service life of ten years.

17.3 Electrical Systems

17.3.1 Main Switchboard

The main switchboard for Building 21 is situated in the Cleaners Cupboard. The board is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, ageing switchgear and equipment are inefficient and potentially dangerous.

17.3.2 Distribution Switchboards

The mechanical controls board in the Plant Room consists of old panels with an assortment of ageing and modern switchgear and equipment, in moderate to poor condition.

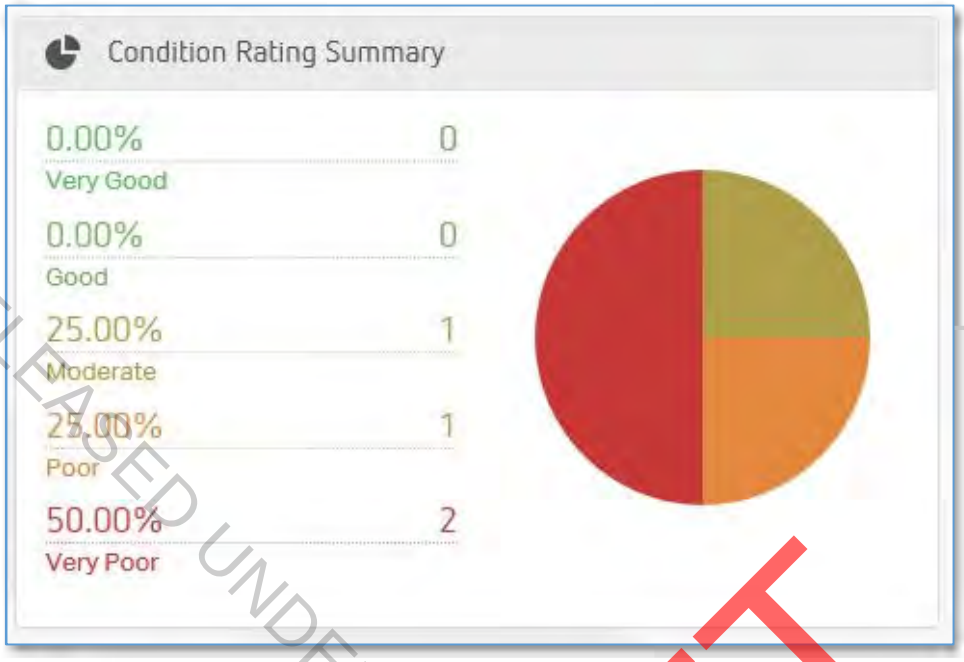

Figure 76 Building 21 Condition of Electrical Systems

17.3.3 Recommendations

- The main switchboard be within 5 years.
- The mechanical controls board in the Plant Room be replaced in 5-10 years.

18 Building 22- Youth Specialty Service

18.1 General

The building was constructed in 1985. The building is timber framed with a concrete block veneer, with stained horizontal timber weather boards above the aluminium joinery. The roof is clad with concrete tile, draining to steel spouting and downpipes. A Portacom style extension was added between 2000 and 2004 with a further extension added between 2005 and 2009. Generally, the original building is in better condition than the Portacom additions. The overall building condition is rated at 2.8.

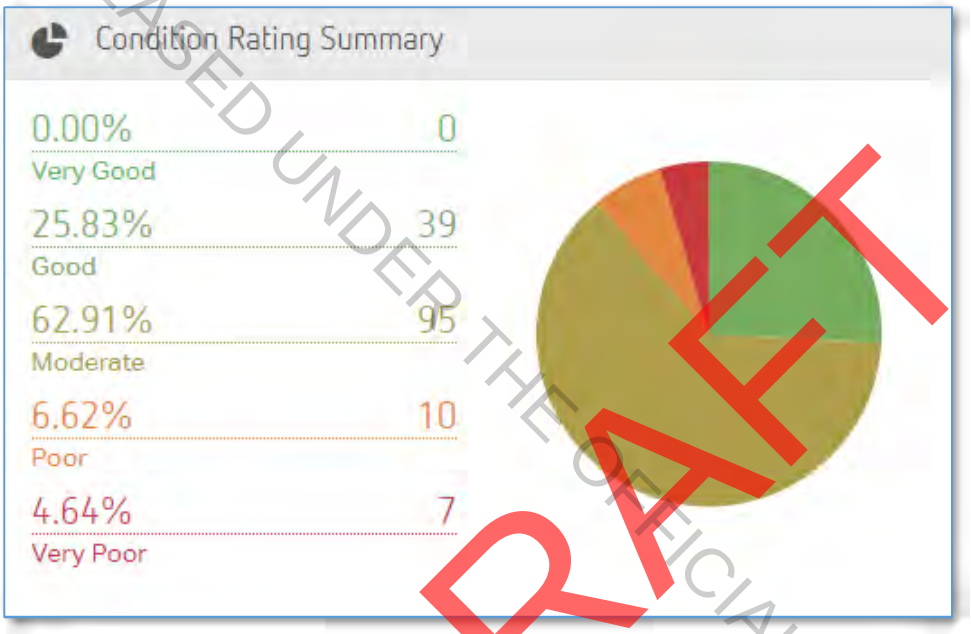

Figure 77 *Building 22- overall condition*

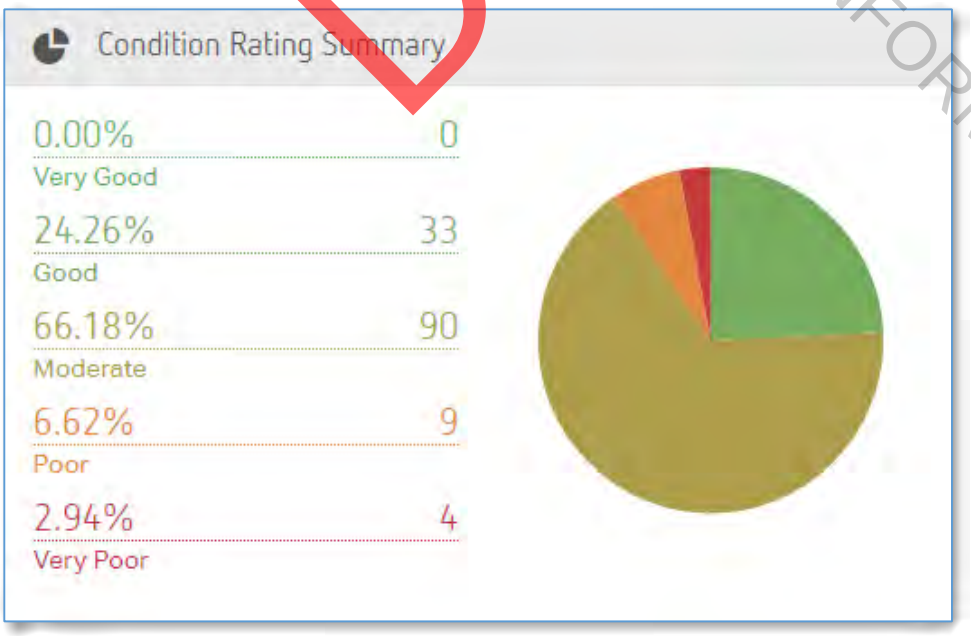

Figure 78 *Building 22- condition of Exterior Elevations*

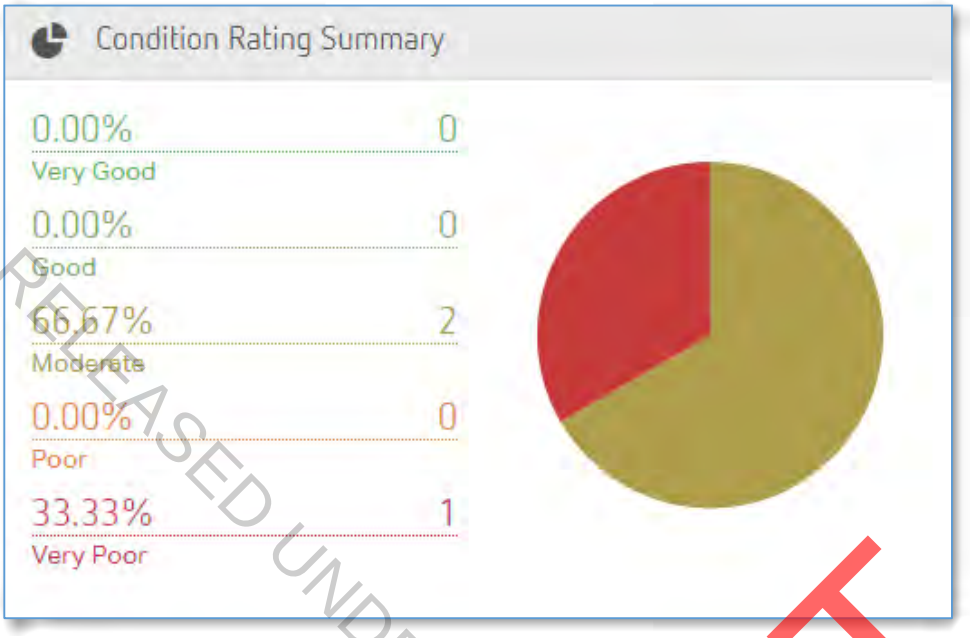

Figure 79 Building 22- condition of roof

18.1.1 Remedial works:

- Ceramic tiles are coming away from the substrate. Investigate cause and repair.
- Door is cracked at hinges. Replace door.
- Repair required to mortar to concrete block
- An overflow pipe that exits near the base of the wall is discharging a steady stream of water. Find cause and remediate.
- Doors to external storage area are heavily cracked and should be replaced.
- Main Building: There are a number of visible defects;
  - Numerous cracked tiles
  - Evidence of roof leaks being temporarily repaired with sealant.
  - The gutters are rusted trough in places, there are also several joints that are leaking.
  - Down pipes are rusted through in places, particularly in the internal courtyard. The down pipe on Elevation 19 is leaking at a high level, suggesting that it is completely blocked.
  - Gutters and downpipes should be replaced, with the storm water laterals checked for blockages. The gutters should then be maintained with regular cleaning. Consideration should be given to replacing the entire roof- if this is not possible, then a competent roofer should permanently repair the old leaks, and replace any cracked tiles.
- Roof extension: Large areas of the roof have been painted with a mastic sealant, presumably to fix leaks. It may be prudent to coat the entire roof with a suitable painted membrane or lay Butanol or similar.

18.2 Mechanical Systems

18.2.1 Heating Plant

The heating plant for Building 22 is situated in the Calorifier Room. The system includes a modern condensing gas boiler supplying heating hot water, replacing site-reticulated heating water as the energy source. The boiler, expansion tank and circulation pumps for comfort heating, calorifier heating and for domestic hot water circulation have been replaced in recent years and are in the first half of their service lives. The domestic hot water calorifier and control valves are original plant and are nearing the end of their service lives. The heating control panel which includes pump controls and heating zone controls is of the same vintage.

18.2.2 Recommendation

The controls equipment should be replaced when the main switchboard and distribution switchboards are replaced within five years. The calorifier should be replaced within a similar time frame.

The boiler and circulation pumps should have an expected remaining service life of ten years.

Figure 80 *Building 22 condition of mechanical systems*

18.3 Electrical Systems

18.3.1 Main Switchboard

The main switchboard for Building 22 is situated in the Calorifier Room and also contains the isolation points for the power supplies to the Portacom building. There is an assortment of switchgear and equipment which vary in age, make and condition. Overall, although in reasonable condition, the main switchboard is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, aging switchgear and equipment are inefficient and may be potentially dangerous.

18.3.2 Distribution switchboards

The distribution switchboards servicing Building 22 are of the same age as the main switchboard and similarly, a replacement should be considered.

Figure 81 *Building 22 condition of Electrical Systems*

18.3.1 Recommendation

The main switchboard and distribution switchboards should be replaced within five years.

19 Building 23 Laundry

19.1 General

The building is believed to have been constructed in the 1970's. It is a concrete structure with open web steel joists supporting a low-pitched roof. The roof has long run raised rib metal roofing. The building has aluminium framed windows.

The overall condition of the building is rated at 3.1.

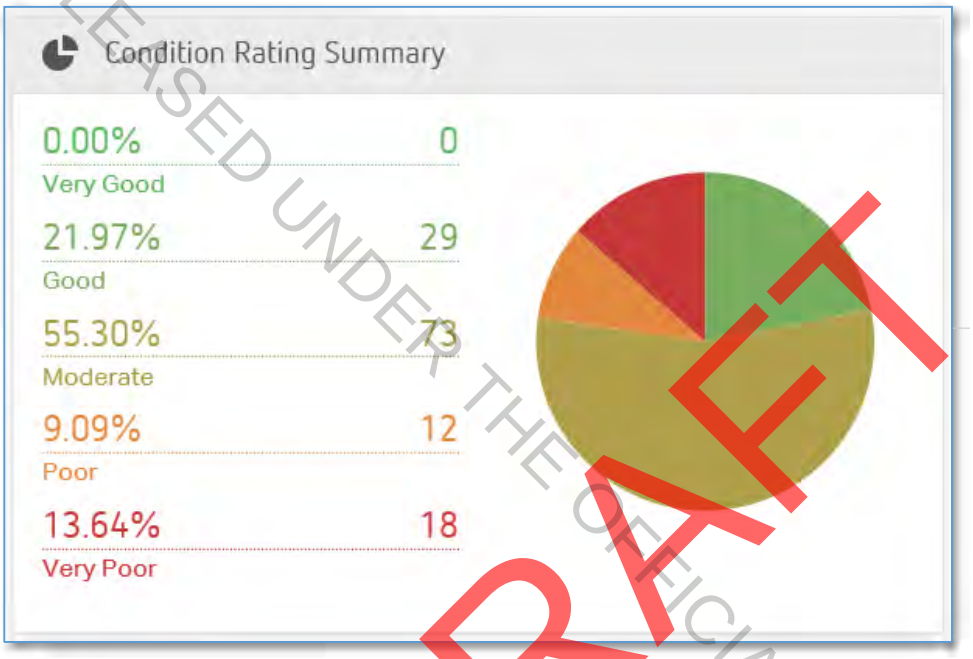

Figure 82 *Building 23 Overall Building Condition*

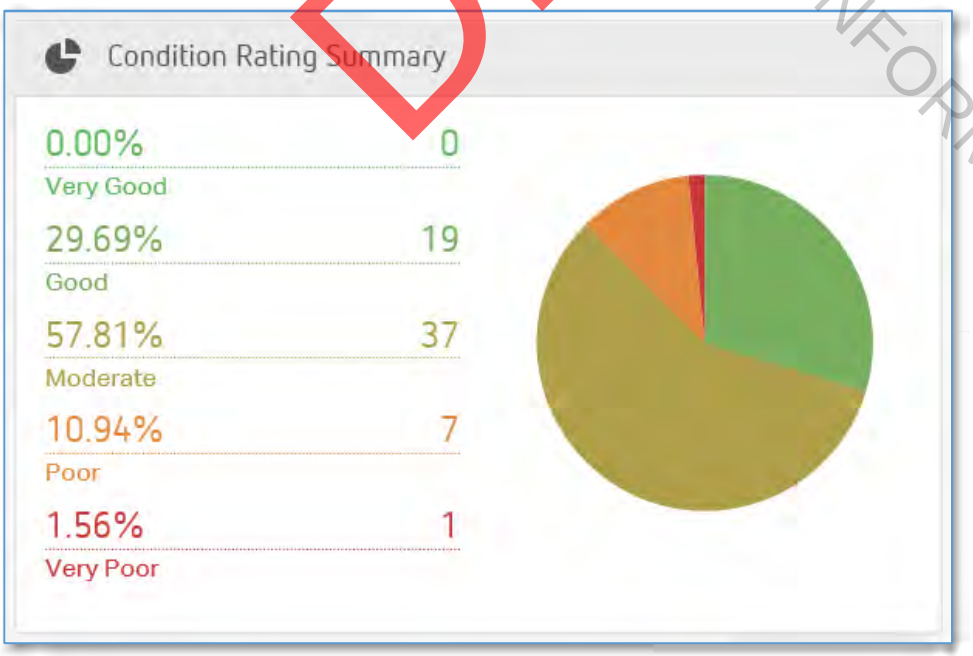

Figure 83 *Building 23 Condition of Exterior Elevations*

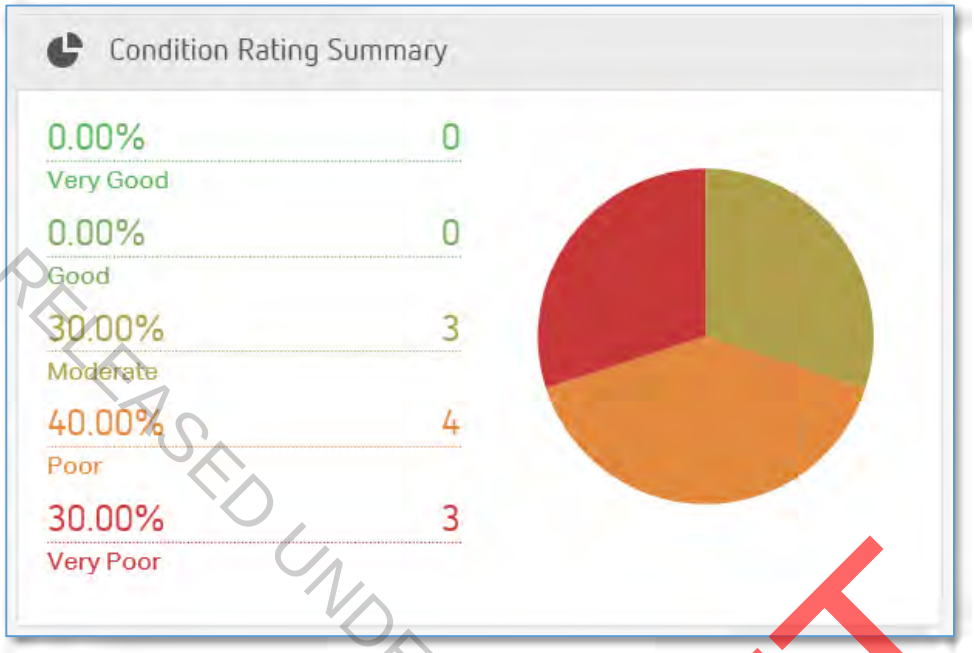

Figure 84 Building 23 Condition of Roof

19.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Guttering and spouting in poor condition
- Section of roof flashing missing and damage to ridge flashing
- Lichen build up in shaded areas requires spraying
- Concrete blocks and steel used to hold down sections of roofing, permanent repair required
- Windows require repainting
- Roof vents removing paint from sections of roof

19.2 Mechanical Services

19.2.1 Heating Plant

Heating energy for Building 23 is generated by two diesel boilers located in the boiler house. One boiler has dual-fuel capability, burning LPG as an alternative. Associated plant includes boiler feed and distribution pumps, fuel systems, buffer tanks, metering and associated controls. The plant is generally in the latter half of its service life with at least ten years of service life remaining with regular maintenance.

The heating plant for Building 23 is located in the ground floor plant room. Mechanical plant includes heat exchangers, pump sets for high and low temperature water supplies, calorifiers, discharge-water filters and heat recovery systems. A compressor, receiver and controls serve some pneumatically actuated control valves.

19.2.2 Recommendation

While some systems have been recently retro-fitted and have long remaining service lives, much of the plant is well into the latter end of its useful service life.

Ventilation plant including air handling and evaporative chillers located on level four of the laundry appears similarly to be nearing the end of its economic service life.

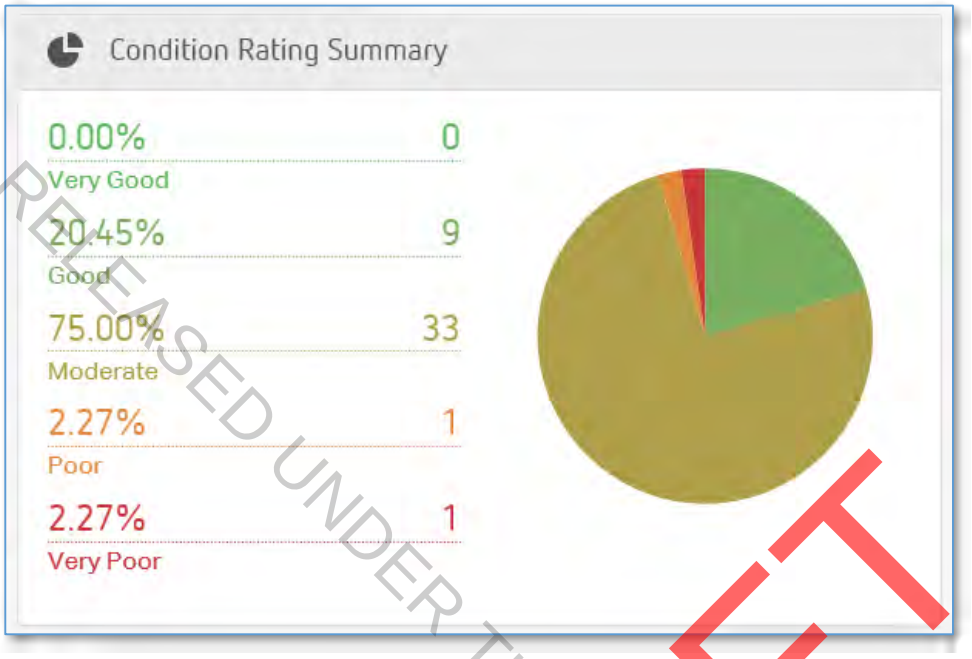

Figure 85 Building 23 Condition of Mechanical Systems

19.2.3 Recommendation

The boiler house plant has an expected remaining service life of at least ten years. Much of the laundry mechanical plant should be scheduled for replacement within the next five years. Its performance will be deteriorating and its rate of repairs increasing, making it increasingly uneconomic to operate.

19.3 Electrical Systems

19.3.1 Main Switchboard

Although in good condition, the main switchboard for Building 23 is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, aging switchgear and equipment are inefficient and potentially dangerous.

19.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls boards servicing Building 23 are of the same age as the main switchboard and similarly, a replacement should be considered.

The exception is distribution switchboard DB-4, which is in good condition with modern switchgear and equipment.

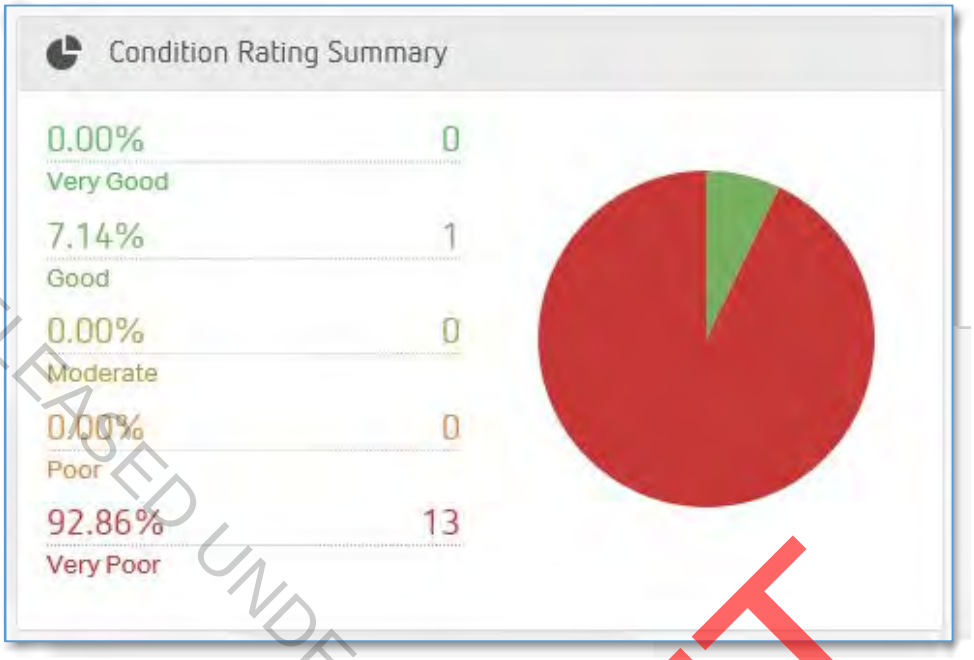

Figure 86 Building 23 Condition of Electrical Systems

19.3.3 Recommendations

- The main switchboard, distribution switchboards (with the exception below) and mechanical controls boards be replaced within 5 years.
- The distribution switchboard DB-4 be replaced in 15-20 years.

20 Building 31 Food Services Main Kitchen

20.1 General

The building was constructed in 1980. It is a combination of timber frame, reinforced concrete and concrete block with a block veneer and reinforced concrete cladding system and has a Dimondek profiled metal roof. The building has predominantly timber framed windows.

The overall condition of the building is rated at 2.5

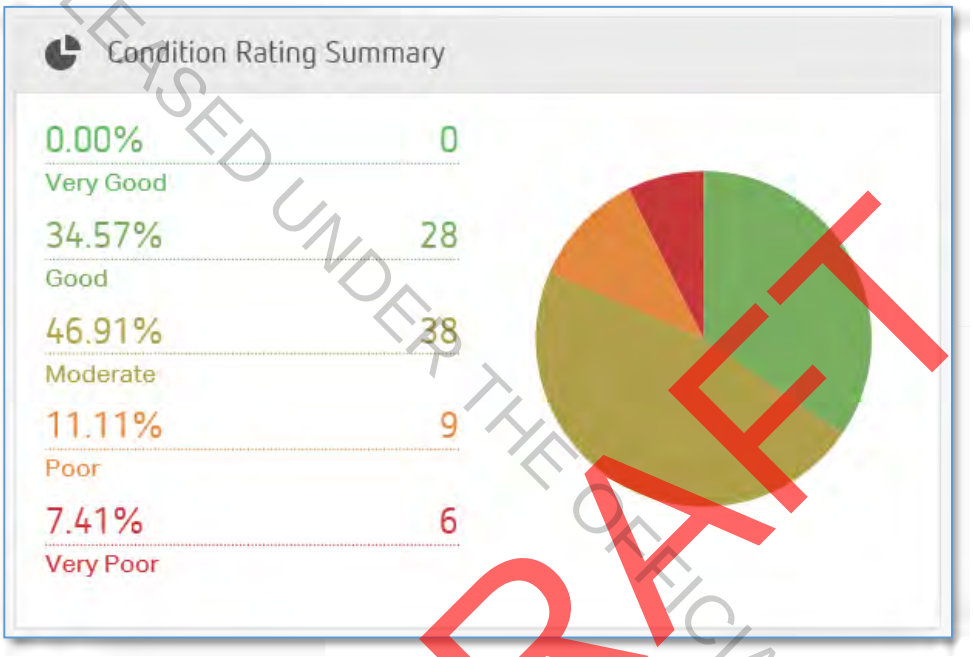

Figure 87 Building 31 Overall Building Condition

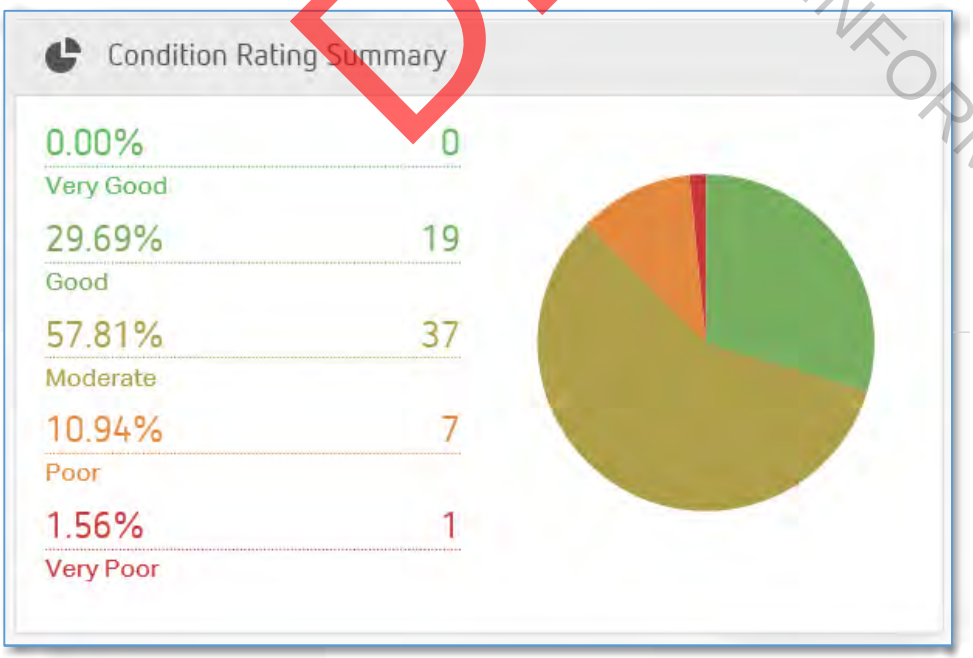

Figure 88 Building 31 Condition of Exterior Elevations

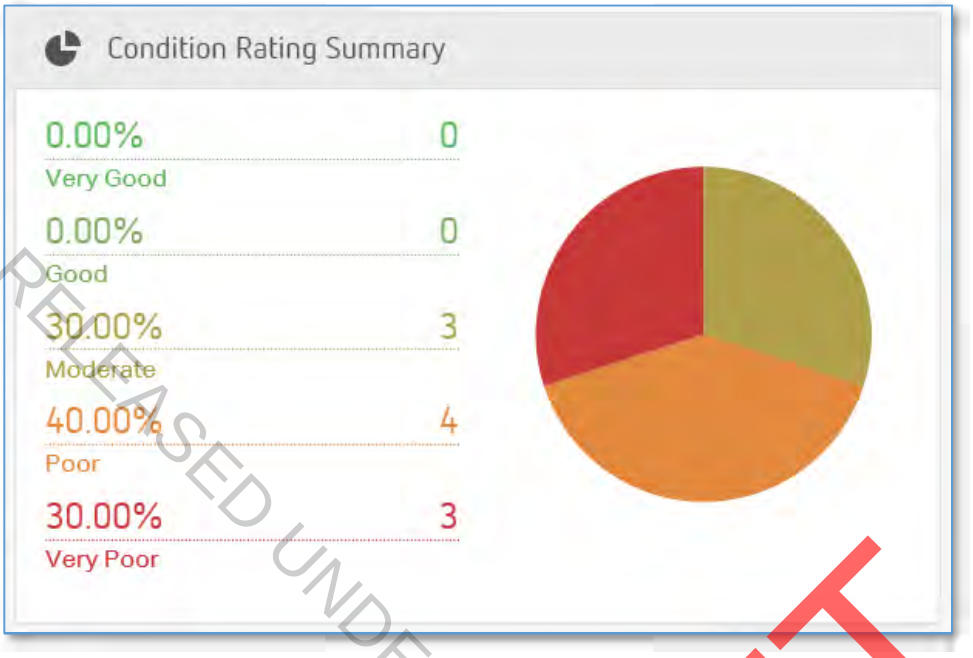

Figure 89 Building 31 Condition of Roof

20.1.1 Remedial Works

Deferred maintenance items noted during the survey included:

- Door cladding failed
- Roof fastening fixed in troughs of roofing evidence of silicon used to affect repairs
- Multiple patches indicate roof leaks are an issue
- Lichen growing on roof
- Parapet capping in poor condition

20.2 Mechanical Services

20.2.1 Heating Plant

The heating plant for Building 31 is in the services basement spaces. Steam from the central heating plant is reticulated to the building and distributed to the kitchen. The plant is at or nearing the end of its useful service life.

Kitchen exhaust fans located outside of plant rooms were not inspected as part of this survey.

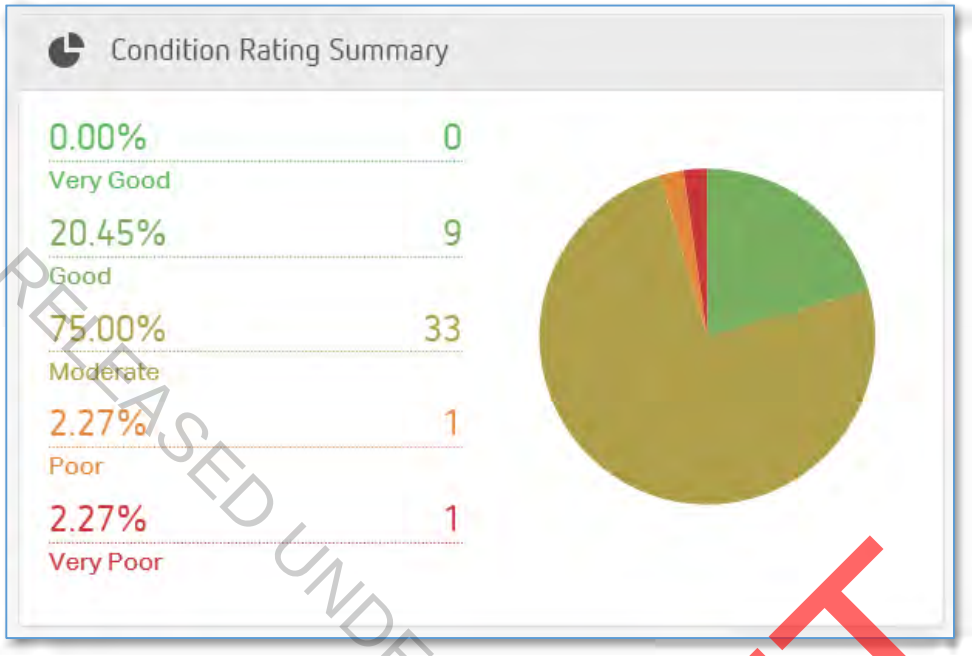

Figure 90 Building 31 Condition of Mechanical Systems

20.2.2 Recommendation

The kitchen mechanical plant should be scheduled for replacement. Its performance will be deteriorating and its rate of repairs increasing, making it increasingly uneconomic to operate.

20.3 Electrical Systems

20.3.1 Main Switchboard

Although in good condition, the main switchboard for Building 31 is at the end of its' economic life and a replacement should be considered. A replacement also provides an opportunity to standardise the switchgear and equipment, which will be beneficial to the maintenance team when a replacement part or item is required. In addition, aging switchgear and equipment are inefficient and potentially dangerous.

20.3.2 Distribution Switchboards

The distribution switchboards and mechanical controls boards servicing Building 31 are of the same age as the main switchboard and similarly, a replacement should be considered.

The exceptions are distribution switchboards DB-1E in the Plant Room and DB.5 in G023, which are in good condition with modern switchgear and equipment.

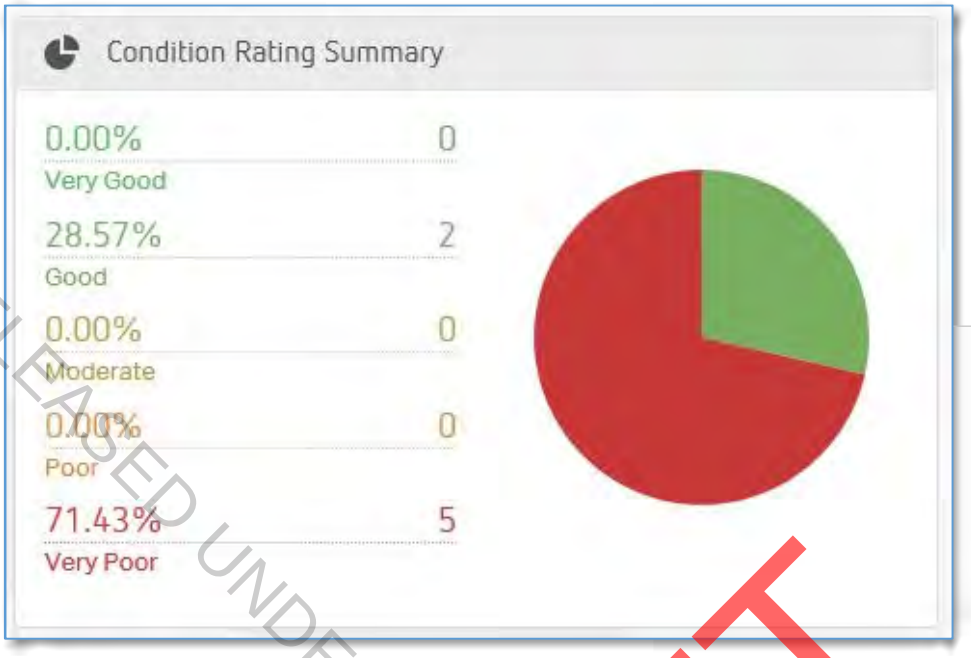

Figure 91 Building 31 Condition of Electrical Systems

20.3.3 Recommendations

- The main switchboard, distribution switchboards (with the exceptions below) and mechanical controls boards be replaced within 5 years.
- The distribution switchboards DB-1E and DB-5 be replaced in 15-20 years.

Appendix 1: Inventory Spreadsheets

Appendix 2: Photos

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Building Details						Current Assessment of Seismic Status							Occupation Status			Future Plans				Other
DHB	City/Campus	Building name	Services In Building	Services In Building	Seismic Importance Level	Has the Building Been Assessed (Yes/No)	If Assessed, Date of Last Assessment NB: All assessments listed are post EQ and ongoing.	Assessed NBS %	Assessment Type If other, use Comment field to specify	Critical Structural Weakness Identified? (yes/no) If yes, use Comment field to specify	Drop Zone Issues Identified? (yes/no) If yes, use Comment field to specify	DHB comment	Is Building Occupied? (Yes/No)	If Occupied, Details of Occupation	If Occupied, DHB to detail the Basis of Continued Occupation (include reference to Board decisions, engineering and legal advice as appropriate)	Is a First or Subsequent Assessment Planned?	Date of repeat damage assessment	Date of Next Assessment (DD/MM/YY)	DHB to outline whether future work is planned (Including Details of Interim or Permanent Remediation and/or Indicative Costs if known)	DHB's general comments or issues
			Most buildings have a mixture of Clinical & Admin (and plant) services. For these buildings, if the main use is Clinical, we have listed them as Clinical				All assessments listed are post EQ and ongoing.					Buildings listed as "YES" in 'Drop Zone' column are multi-storeys which may have risk of collapsing onto other surrounding buildings during a major EQ.		Most buildings have a mixture of uses. As the 'drop down' box only allows 4 fixed options, CDHB has listed the 'best fit' occupation type below.	Occupation takes into account all relevant circumstances including need to deliver health services, which requires a judgement of risk in continuing to occupy buildings against the level of risk to the population, patients and clinical services if the buildings were not available. In making these decisions CDHB continues to take account of advice from external engineers and other experts as well as clinical and non-clinical staff in relation to the health services involved. In addition the Board has taken legal and Health & Safety advice and have created a decision-making framework to assist.	First Assessment completed for all. Subsequent EQ assessment, repair and upgrade is an ongoing process and will be/has been carried out where appropriate			Post EQ repair work is ongoing for all buildings. The extent of work for buildings on the Christchurch (incl St Asaph St), TPMH and Burwood campuses is being considered in the light of the ChCh / B'wood redevelopment works currently underway	
Canterbury	Christchurch	Riverside	Clinical	Wards (including bone marrow transplant), some outpatient services, critical plant, temporary relocations from other locations	IL3	Yes	16/02/2016, 20/12/17(River side central)	45-55% IL3 (Riverside East & West Based on new guidelines) <34% Riverside central	Formal Structural Assessment/ Detailed Assessment and most recently (Dec 2017) detailed seismic assessment of Riverside central.	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Building settlement. Cracking of concrete shear walls & strain hardening of reinforcing. Cracking in columns, spandrel panels & floor slabs. Water ingress to basement area. Repair works include the construction (by overlay or replacement) of shear walls, addition of new structure to address critical structural weaknesses. The work will be very disruptive & requires decanting of spaces. Repair works include the construction (by overlay or replacement) of shear walls, addition of new structure to address critical structural weaknesses. The work will be very disruptive & requires decanting of spaces. Blockwork wall to LGF plant room has been repaired similar to TPMH. Structural pounding assessment between east / central and west complete by HCG. It has been confirmed that the relative NBS score for this to occur is above the building NBS score therefore HCG have confirmed no specific repairs required for this. Currently investigating durability issues with Terrazzo panels, basement cracks and pounding issues with CSB. Replacement of the old heavy ceilings approximately 98% complete with balance to be completed when acces to key clinical areas is given. The central building is classed as EQ prone due to heavy water tanks at Level 6.
Canterbury	Christchurch	Parkside	Clinical	Emergency Department, ICU, Operating Theatres & Wards	IL4	Yes	16/02/2016, 20/12/17(River side central NLTA used to revise assessments)	55% to 65% IL4(however governed now by precast panels which reduces this capacity to <34% IL4. ED extension 35% to 45% IL4, link bridges 40% to 45% to IL3;	Formal Structural Assessment/ Detailed Assessment. Dec 2017	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Last of staircase upgrades complete	Other than the recorded differential settlement, damage considered to be modest, with cracking in shear towers, floors, walls & columns, but generally able to be resin injected. Cracking in stair cases require a new structure to be introduced intended to allow the stairs to accommodate inter-storey differential deflection. rectification of differential settlement will be technically difficult & expensive. Gap between Parkside and School of Medicine roof investigated an as part of the overall building repair strategy, the gap needs to be increased. Full height precast panel fixings are compromised and a repair strategy is being priced. A structural review of the canopys is complete with glass removed. All the old heavy ceiling tiles have been replaced. Block A basement slab repair complete
Canterbury	Christchurch	Clinical Services	Clinical	Radiology, Nuclear medicine, Child Acute Assessment, Pharmacy, Physiotherapy, paediatric Outpatients, Critical Plant	IL3	Yes	4/10/13	35% IL3, Plant Roof 30% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Future upgrade planned.	Works similar to Riverside. Upgrade being planned. Note that whilst the roof plant space structure is considered to be EQ prone, allowing for a slightly reduced safety factor & the small percentage of the overall building area, the while building is NOT considered to be EQ prone. Seismic gap to Riverside roof complete. Plant room repairs / upgrade being planned. Completed investigations as to the impact of cracks within the basement and repair strategy to be implemented. Replacement of old heavy ceilings is approximately 80% complete, consent obtained for remainder
Canterbury	Christchurch	Food Services	Clinical	Kitchen and Cafeteria	IL3	Yes	7/03/14	45% IL3 Now governed by precast panels which makes this <34% NBS of IL3	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Repair to full height panels over means of escape underway. Future upgrade planned.	Minor to moderate cracking in the basement, floor slabs & some concrete beams. Some differential settlement recorded. Problem with several full height pre-cast panels. Due to the matrix used on Parkside undertaking the repairs to the panels over the means of escape and the others will be addressed at the same time as the upgrade
Canterbury	Christchurch	Oncology	Clinical	Oncology services, oncology staff, offices and plant	IL3	Yes	27/04/12	50% IL3 /60-70% IL2	Formal Structural Assessment/ Detailed Assessment	No	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Repair of CSW to staircase now complete	Minor to moderate cracking in the basement, floor slabs, staircase & some concrete beams. Staircase has had a separate structure installed, similar to Parkside. Canopy structurally inspected at 100% IL2 but glazing needs to be verified. Issue identified with external panels next to lecture theatre addition being EQ prone
Canterbury	Christchurch	Canterbury Health Laboratories	Clinical	Laboratory services	IL3	Yes	23/11/12	55-65% IL3 Goverened by stairs/precast panels <34% of IL3	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Staircase & external full height wall panel works commenced. Future upgrade dependant on long term decision regarding the labs facility.	Differential settlement. Cracking in columns, floors & beams. Cracking of stairs requiring the introduction of a new support system, similar to the Parkside building. Cracking & movement of the external pre-cast panels. Stair 1, Stair 3 and Stair 5 completed and stair 4 in progress.
Canterbury	Christchurch	Endo Labs	Clinical	Laboratory services	IL2	Yes	6/08/12	70% IL2	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Feb-15	N/A		Some settlement. Minor to modest cracking.
Canterbury	Christchurch	Dental (new) (Previously PDU)	Clinical	Demolished	IL2	Yes	3/02/12	43% IL2	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	N/A	N/A	N/A		Demolished
Canterbury	Christchurch	Christchurch Womens	Clinical	Obstetrics and Gynaecology services	IL4	Yes	7/12/13	100% IL4	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Repairs to floor slabs 70% complete, Repair to staircases planned	The building performed well, but minor to moderate cracking noted at various levels. Rectification will require stripping back of finishes to expose cracks & allow remedial works. Some adjustment to the staircase support structure required. Canopy glass has been removed and working up reinstatement options and remedial for canopy.
Canterbury	Christchurch	Te Whare Mahana	Other			Yes	8/12/10	n/a	Initial Evaluation Process (IEP)	-	No	As per above	Yes	Residential	As per above	-				Building relocated to another site to accommodate new Acute Services Building
Canterbury	Christchurch	k) Diabetes & Home Dialysis Training Centre	Clinical	Diabetes and Home Dialysis	IL2	Yes	28/02/12	<33% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical - Most buildings have a mixture of Clinical & Admin (and plant) services. For these buildings, if the main use is Clinical, the DHB has listed them as Clinical. As the 'drop down' box only allows 4 fixed options, CDHB has listed the 'best fit' occupation type below.	Occupation takes into account all relevant circumstances including need to deliver health services, which requires a judgement of risk in continuing to occupy buildings against the level of risk to the population, patients and clinical services if the buildings were not available. In making these decisions CDHB continues to take account of advice from external engineers and other experts as well as clinical and non-clinical staff in relation to the health services involved. In addition the Board has taken legal and Health & Safety advice and have created a decision-making framework to assist.	First Assessment completed for all. Subsequent EQ assessment, repair and upgrade is an on-going process and will be/has been carried out where appropriate	Apr-18	N/A	Likely to be demolished.	Cracking in walls, columns & building movement induced damage to internal walls. Decision made that it is uneconomic to repair
Canterbury	Christchurch	i) Nurses Memorial Chapel	Other		IL2	Yes	13/09/13	<33% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			No	N/A	N/A		Damage to basement columns will require full replacement. As a Unreinforced Masonry structure it will require a new bracing system to be installed & that will require detailed discussions with the Historic Places Trust. Not been a clinical priority for analysis. No longer occupied. Transferred to CCC ownership
Canterbury	Christchurch	m) Avon Generator	Clinical	Generators	IL4	Yes	10/04/13	15% IL4	Formal Structural Assessment/ Detailed Assessment	Yes	No		No	Clinical services provided	Limited access to maintain equipment only	Yes	Feb-15	Rapid assessment completed following eq event on 13/11/16		Cracking to columns 7 walls. Building subject to lateral spread risk. Adjacent ground remediation works underway.
Canterbury	Christchurch	n) Link Tunnel	Other	Contains critical services - steam power, data, medical gases, water.	IL4	Yes	N/A	100% IL4	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	No			Yes	Feb-15	N/A		Upgrade works complete
Canterbury	Christchurch	o) 235 Antigua St	Clinical	Boiler house / Other	IL4	Yes	14/05/13	Boil. 40-50 IL4 Admin:16-20 IL2 Café: 25-30 IL2 Workshop 20 IL2	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	235 Antigua to be demolished	Remaining areas deficient roof diaphragms & external wall stability. Cracking in shear walls. Settlement. Partly occupied i.e. the boiler part of the building is occupied while the rest is not.
Canterbury	Christchurch	r) 33 St Asaph St	Clinical and Administration	Information Systems, Sexual Health, Clinical Engineering, M&E,SRDU	IL2	Yes	30/03/12	25%-40% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	No	Clinical services provided	As per above	No	Feb-15	N/A		Demolition to ground completed
Canterbury	Christchurch	s) 41 St Asaph St	Clinical	Sterile Services, Social Work & Child Protection	IL3	Yes	15/06/11	54% IL2	Initial Evaluation Process (IEP)	-	Yes	As per above	No	Clinical services provided	As per above	No	N/A	N/A		Demolished
Canterbury	Christchurch	u) Squash Courts	Other		IL2	Yes	3/10/13	>67% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes			Yes	Apr-18	Apr-19		Cracking in walls & columns.
Canterbury	Christchurch	v) Staff Car Park	Other		IL2	Yes	21/09/12	90% IL2	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes		As per above	Yes	Feb-15	Rapid assessment completed following eq event on 13/11/16		Significant damage, but since repaired. Seismic score reflects some improvement already undertaken.
Canterbury	Christchurch	z) Dentistry (old-vacated)		Vacated						-	Yes	As per above	No			No	N/A	N/A	To be demolished.	demolished
Canterbury		Montreal House (former Lyndhurst Hospital)	Clinical	Vacated	IL2	Yes	1/08/11	100% IL2	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes			No	N/A	N/A	Seismic upgrade underway	Recently refurbished and structurely upgraded

Building Details						Current Assessment of Seismic Status							Occupation Status			Future Plans				Other
DHB	City/Campus	Building name	Services In Building	Services In Building	Seismic Importance Level	Has the Building Been Assessed (Yes/No)	If Assessed, Date of Last Assessment NB: All assessments listed are post EQ and ongoing.	Assessed NBS %	Assessment Type *If other, use Comment field to specify*	Critical Structural Weakness Identified? (yes/no) *If yes, use Comment field to specify*	Drop Zone Issues Identified? (yes/no) *If yes, use Comment field to specify*	DHB comment	Is Building Occupied? (Yes/No)	If Occupied, Details of Occupation	If Occupied, DHB to detail the Basis of Continued Occupation (include reference to Board decisions, engineering and legal advice as appropriate)	Is a First or Subsequent Assessment Planned?	Date of repeat damage assessment	Date of Next Assessment (DD/MM/YY)	DHB to outline whether future work is planned (Including Details of Interim or Permanent Remediation and/or Indicative Costs if known)	DHB's general comments or issues
Canterbury		Whakatata House	Clinical	Child & Family Speciality Service, Mental Health Outpatients	IL2	Yes	22/04/15	100% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes			Yes	Feb-15	N/A	Seismic upgrade completed & now reoccupied.	Works complete
Canterbury		40 Gracefield Ave	Other	Residential, Vacated			25/05/12	n/a		-	No		No			No	N/A	N/A	To be demolished.	Most recently used as residential. Differential settlement. Needs new internal bracing systems & refurbishment. No longer occupied.
Canterbury		181 Linwood Ave	Clinical	Vacated.	IL2	Yes	25/05/12	34% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	No	N/A	N/A	Building will be seismically upgraded	.All require re-levelling & new internal bracing systems + interior refurbishment. Have recently completed some short term works, just to get the building to 34% code.
Canterbury		183 Linwood Ave	Clinical	Club 304	IL2	Yes	25/05/12	67% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	-	N/A	N/A	Repairs complete to 67% IL2	Repaired and seismically upgraded to accommodate relocated team from Burwood Hospital
Canterbury		185 Linwood Ave	Clinical	Vacated.	IL2	Yes	25/05/12	34% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	No	N/A	N/A	Building will be seismically upgraded	
Canterbury		173 Riccarton Rd	Clinical	Leased to Com Care	IL2	Yes	26/10/12	Building A 40% IL2; Building B 80% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-15	N/A		Chimney damage already addressed. Remaining is minor structural or cosmetic damage.
Canterbury	4 Princess Margaret	93 Cashmere Rd	Clinical	vacated	IL2	Yes	14/08/12	15% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	evacuated	No	N/A	N/A		Differential settlement. Perimeter foundation cracking. Interior wall cracking. Inadequate internal bracing systems. DHB has moved this team into another building.
Canterbury	4 Princess Margaret	Boiler House	Clinical	Boiler and Plant Room	IL3	Yes	21/01/13	35% IL3	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Some brick veneer has been removed. Ground settlement. Cracking in concrete elements
Canterbury	4 Princess Margaret	Chapel	Other		IL2	Yes	28/11/12	45%-55% IL2	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes		As per above	Yes	Apr-18	Apr-19		
Canterbury	4 Princess Margaret	Riley Day Hospital	Clinical	Day Hospital	IL2	Yes	3/10/13	IL2 - >67% above ground & 35% Foundations 35%; 52% & 27% IL3 respectively	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		External masonry removed. Internal damage to wall & ceiling linings. Some floor level issues. Note EQ prone at IL3
Canterbury	4 Princess Margaret	The Heathcote Building	Clinical and Administration	Seagar, Nurses Hostel, A Blk, B Blk	IL3	Yes	18/07/13	35%-42% IL3 Main block. 69% IL3 Seager	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Feb-17	Jul-18		Differential settlement. Cracking to various structural elements, masonry veneers. Rectification of settlement will be difficult.
Canterbury	4 Princess Margaret	K Ward	Clinical	K Block, Block 1&2	IL3	Yes	21/09/12	80% IL2 or 62% IL3	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		All external masonry has been removed. Small issue with water tank support platform (40% IL2) but an easy fix. Differential settlement. Otherwise minor structural works.
Canterbury	4 Princess Margaret	Main Building Block A	Clinical	Main Ward	IL3	Yes	21/04/15	35-50% IL3. Some CSW's	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Differential settlement. Cracking with basement, floors & walls. Work required to re-level the building will require decanting & be very expensive. Repaired 1 Nr CSW to Block A. Blockwork walls throughout have been secured to 67% with LVL propping
Canterbury	4 Princess Margaret	Main Building Block B	Clinical	Main Ward	IL3	Yes	21/04/15	40-65% IL3, CSWs	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Similar issues to Block A .Blockwork walls throughout have been secured to 67% with LVL propping
Canterbury	4 Princess Margaret	Main Building Block C	Clinical	Mother Babies, Youth Day(P16), Eating Disorders	IL3	Yes	11/09/12	IL2 - 40% structure, foundations 35%; IL3 = 31% & 27% respectively	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		External masonry has been removed. New parts of the building have a reasonable / good seismic score. Problem relates to the older portion. Damage internally is modest. Note that IL3 level, is considered to be EQ prone
Canterbury	4 Princess Margaret	Main Building Block E	Clinical and Administration	Main Ward & Offices, Cafeteria & Kitchen, Physio, Main Entrance	IL3	Yes	21/04/15	25-45% IL3, CSWs	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Differential settlement. Allowing for an appropriate safety factor against the onset of collapse, the engineers consider this block to be EQ prone. Range of structural issues to address, which will be very disruptive to the use of the building. .Blockwork walls throughout have been secured to 67% with LVL propping
Canterbury	4 Princess Margaret	Main Building Block F	Clinical and Administration	Offices/Clinical Support	IL2	Yes	22/04/15	40-50% IL2, CSWs	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	No	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Reviewing future occupation options	Differential settlement. Cracking to various structural components. Critical Structural weaknesses identified. Blockwork walls throughout have been secured to 67% with LVL propping
Canterbury	4 Princess Margaret	Main Building Block H	Clinical and Administration	Offices/Clinical Support	IL2	Yes	22/04/15	40-50% IL2, CSWs	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	No	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Reviewing future occupation options	Similar to Block F .Blockwork walls throughout have been secured to 67% with LVL propping
Canterbury	4 Princess Margaret	Main Building Block J	Clinical	Cafeteria & Kitchen	IL2	Yes	18/08/14	New 60% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	demolition work complete	Differential settlement is quite marked at this location in the complex. The older portion of this building has been demolished.
Canterbury	4 Princess Margaret	Main Building Block R	Clinical	Radiology, Cardiothoracic Appeal Trust(P15)	IL3	Yes	8/02/12	69% IL3	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	No	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Modest damage, but some differential settlement.
Canterbury	4 Princess Margaret	Mabel Howard	Clinical	PSE	IL2	Yes	12/12/12	50% IL2; 38% IL3	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Masonry cladding already removed. Ceiling & wall linings damaged. Some foundation damage.
Canterbury	4 Princess Margaret	Emergency Generator Room	Clinical	Generators	IL2	Yes	3/10/13	40% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Cracks in foundations & masonry veneer. Cracks in concrete walls & columns. Some settlement
Canterbury	4 Princess Margaret	Recreation Hall	Other	Vacated	IL2	Yes	20/07/12	20% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No		As per above	No	N/A	N/A		Some differential settlement. Cracking to columns & walls. Building is EQ prone. Now Vacant.
Canterbury	4 Princess	Reservoir	Other		IL3	Yes	12/10/12	40%-50% IL3	Formal Structural Assessment/	-	No		No	Maintenance	As per above	No	N/A	N/A		
Canterbury	5 Burwood	304 Burwood Rd	Clinical	Demolished	IL2	Yes	23/08/12	30% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	N/A	N/A	N/A	Demolished by main project	
Canterbury	5 Burwood	Allan Bean Centre	Clinical and Administration	Demolished	IL2	Yes	6/12/11	35% IL2, Block walls 20	Formal Structural Assessment/ Detailed Assessment	Yes	No		No	Clinical services provided	As per above	N/A	Jul-14	N/A	Demolition work complete	
Canterbury	5 Burwood	Beacon House	Clinical	Child Assessment & intervention	IL2	Yes	24/09/13	IL2 - 27%-100%	Formal Structural Assessment/ Detailed Assessment	Yes	No		No	Clinical services provided	As per above	No	Feb-15	N/A	To be demolished by main project	Demolished
Canterbury	5 Burwood	Boiler House & Maintenance	Clinical	Boiler and Site Maintenance Building	IL3	Yes	14/11/12	35-40% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Boiler house to be replaced as part of new development	
Canterbury	5 Burwood	Brain Injury (BIRS)	Clinical	Demolished	IL3	Yes	11/07/12	23% IL3 30% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	N/A	N/A	N/A	Demolished	Earthquake (EQ) Prone at both classifications. Differential settlement. Cracking of walls, associated with settlement. Damage to braced walls & ceiling diaphragms.
Canterbury	5 Burwood	Chapel	Other	Chapel	IL2	Yes	18/09/15	67% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	N/A	Feb-15	N/A		Seismic upgrade complete
Canterbury	5 Burwood	Engineering Services	Other	Plant Room	IL2	Yes	14/09/12	77% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Maintenance services only	As per above	Yes	Apr-18	Apr-19		Minor to moderate structural cracking. Some differential settlement
Canterbury	5 Burwood	Food Services	Clinical	Demolished	IL2	Yes	8/06/12	34% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No	Clinical services provided	As per above	N/A	N/A	N/A	Demolished	
Canterbury	5 Burwood	Medical Records	Administration	Clinical Records	IL2	Yes	17/08/12	55% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Administration services only	As per above	N/A	Feb-15	N/A	Demolished	Differential settlement. Cracking to walls & ceilings. Cracking of external finishes.
Canterbury	5 Burwood	Miner Lodge	Other	Accommodation - patients and families	IL2	Yes	13/01/14	100% IL 2	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Residential	As per above	Yes	Feb-15	N/A	works complete	Refurbished and upgraded structurally

Building Details						Current Assessment of Seismic Status							Occupation Status			Future Plans				Other
DHB	City/Campus	Building name	Services in Building	Services in Building	Seismic Importance Level	Has the Building Been Assessed (Yes/No)	If Assessed, Date of Last Assessment NB: All assessments listed are post EQ and ongoing.	Assessed NBS %	Assessment Type If other, use Comment field to specify	Critical Structural Weakness Identified? (yes/no) If yes, use Comment field to specify	Drop Zone Issues Identified? (yes/no) If yes, use Comment field to specify	DHB comment	Is Building Occupied? (Yes/No)	If Occupied, Details of Occupation	If Occupied, DHB to detail the Basis of Continued Occupation (include reference to Board decisions, engineering and legal advice as appropriate)	Is a First or Subsequent Assessment Planned?	Date of repeat damage assessment	Date of Next Assessment (DD/MM/YY)	DHB to outline whether future work is planned (including Details of Interim or Permanent Remediation and/or Indicative Costs if known)	DHB's general comments or issues
Canterbury	5 Burwood	Nurses Hostel West	Clinical and Administration	West Wing, Former Hostel, Champion Centre, Public Health Nurses	IL2	Yes	31/03/13	West 67% IL2 South 45%IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Differential settlement. Cracking in service tunnels. Floor slab cracking masonry panel cracking. Pounding damage at entrance. URM walls have been braced or removed
Canterbury	5 Burwood	Nurses Hostel East	Clinical and Administration	Demolished	IL2	Yes	29/01/13	IL2 - 15% - 20%	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	N/A	N/A	N/A	Demolished	
Canterbury	5 Burwood	Orthopaedic Rehab Unit	Clinical	Orthopaedic and elective surgery ward	IL3	Yes	2/04/15	67% IL3	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Feb-14	Rapid assessment completed following eq event on 13/11/16	100% upgrade works planned	67% scheme complete and bracket to columns planned for 100% upgrade
Canterbury	5 Burwood	Pain Management Cottage	Clinical	Spinal Self Care	IL2	Yes	31/01/13	70% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A	To be demolished	Differential settlement. Cracking to wall & ceiling diaphragms.
Canterbury	5 Burwood	Physical Medicine	Clinical	Physical Medicine, Allied Health	IL2	Yes	25/08/15	Pool 70% IL2 Gym 35% IL2 Offices 50% IL2 Workshop 67% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Gymnasium would be considered EQ prone if IL3. Close to that at IL2. Differential settlement. Damage to perimeter frames & infill walls. Also similar on internal frames & walls. Masonry cracking. Damage to tiling in pool area. 100% scheme developed
Canterbury	5 Burwood	Orthopaedic Outpatient / BSU Hostel	Clinical	BSU Hostel, Spinal Injury Hostel, Orthopaedic Outpatients	IL2	Yes	20/11/13	25% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Isolated extensions have been strengthened above 33% but overall capacity still goverened by insufficient bottom plates and fixings and remains at 25% IL2
Canterbury	5 Burwood	Administration (Surgical Block)	Clinical and Administration	Maori Health, Quality, Clinical services	IL2	Yes	9/08/13	Maori Health 45%IL2	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		
Canterbury	5 Burwood	Spinal Unit	Clinical	Spinal Injuries Unit	IL3	Yes	29/05/14	40% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Upgrade planned	Work completed to improve the corridor ceiling diaphragm, which will raise the seismic capacity to 38%. Differential settlement. 100% IL3 repair scheme in planning. Repairs to commence April 2018.
Canterbury	5 Burwood	Administration (Old Main Entrance)	Administration	Office	IL2	Yes	28/08/15	IL2 - 80%, Canopy 40%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Administration services only	As per above	Yes	Apr-18	Apr-19	Canopy to be demolished	Differential settlement. Spreading of floor slabs. Cracking in floors & walls. Entrance canopy & architectural wall out of plumb. 1 00%IL2 scheme developed
Canterbury	5 Burwood	Sprinkler Reservoir	Other		IL2		N/A	n/a		-	No		Yes	Maintenance services only	As per above	N/A	N/A	Rapid assessment completed following eq event on 13/11/16		
Canterbury	5 Burwood	Surgical Block	Clinical	Old Surgical Block	IL2		25/08/15	67% il2		-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Upgrade planned	Works to ground floor brickwork walls complete and 1st floor to be programmed on migration of radiology. URM walls are 15% IL2 but don't govern overal capacity
Canterbury	5 Burwood	Surgical Services Unit	Clinical	Theatres, Ward, Corridors, New Surgical Wing, SOU, SCU, TSU	IL3	Yes	2/04/14	67% IL3	Formal Structural Assessment/ Detailed Assessment	-	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Fix to 67% complete, 100% scheme developed
Canterbury	5 Burwood	Tapper Units	Clinical	Spinal Self Care, Self Care Units	IL2	Yes	4/03/14	100% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A	Upgrade complete	

Building Details						Current Assessment of Seismic Status							Occupation Status			Future Plans				Other
DHB	City/Campus	Building name	Services in Building	Services in Building	Seismic Importance Level	Has the Building Been Assessed (Yes/No)	If Assessed, Date of Last Assessment NB: All assessments listed are post EQ and ongoing.	Assessed NBS %	Assessment Type If other, use Comment field to specify	Critical Structural Weakness Identified? (yes/no) If yes, use Comment field to specify	Drop Zone Issues Identified? (yes/no) If yes, use Comment field to specify	DHB comment	Is Building Occupied? (Yes/No)	If Occupied, Details of Occupation	If Occupied, DHB to detail the Basis of Continued Occupation (include reference to Board decisions, engineering and legal advice as appropriate)	Is a First or Subsequent Assessment Planned?	Date of repeat damage assessment	Date of Next Assessment (DD/MM/YY)	DHB to outline whether future work is planned (including Details of Interim or Permanent Remediation and/or Indicative Costs if known)	DHB's general comments or issues
Canterbury	5 Burwood	Birthing Unit	Clinical	Wards 7 & 8	IL3	Yes	24/03/14	30% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	Yes	Feb-15	N/A	To be demolished	preliminary demo works commenced building now vacant
Canterbury	6 Hillmorton	Administration	Clinical and Administration	Avon Café, Support Services, Physio, Pharmacy, Central Services	IL2	Yes	2/05/12	30% IL2 but 70% IL2 in some sections	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		EQ prone at this level. Widespread but minor structural cracking. Some relevelling
Canterbury	6 Hillmorton	Chapel	Other	Demolished	IL2	Yes	19/01/12	<33% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A	Demolished	
Canterbury	6 Hillmorton	Cluny Villa	Clinical	Demolished	IL2	N/A		<33% IL2	-	-	No		No			N/A	N/A	N/A	Demolished	
Canterbury	6 Hillmorton	Energy Centre	Clinical	Site Maintenance, Plant room	IL3	Yes	21/06/12	80% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Widespread but minor structural damage. Cracking in pre-cast panels & columns. Some relevelling
Canterbury	6 Hillmorton	Fergusson Building	Clinical	MH services	IL2	Yes	3/07/12	Now 60% IL2 minimum. Some parts of building recently upgraded	Formal Structural Assessment/ Detailed Assessment	Yes	Yes	As per above	Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	Seismic upgrade & interior refurb completed.	Better seismic score in some parts of this building. Widespread but minor cracking to concrete walls, columns, masonry walls, wall & ceiling linings. Upgrade of building completed
Canterbury	6 Hillmorton	Forensic Services	Clinical	Te Whare Manaaki, Te Whare Hohou Roko	IL3	Yes	23/11/11	90% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Masonry veneer cracking. Internal bracing wall cracking. Some relevelling
Canterbury	6 Hillmorton	Grounds Maintenance	Other	Old Boiler house, chimney	IL2	Yes	25/05/12	50% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Maintenance services only	As per above	Yes	Apr-18	Apr-19	Old boiler house likely to be demolished.	Chimney demolished.
Canterbury	6 Hillmorton	Kiwi Kids Nursery & Preschool	Other	Kiwi Kids Nursery & Preschool are Tenants	IL2	Yes	25/05/12	60% IL3 or 78% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	Yes	Apr-18	Apr-19		Widespread but minor cracking to foundation walls, brick façade, masonry walls, wall & ceiling linings
Canterbury	6 Hillmorton	Oral Health Clinic	Clinical	Dental				>67% II2		-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		
Canterbury	6 Hillmorton	Aroha Pai	Clinical	PSAID/ATR Unit, Randolph, Assessment, Treatment & Rehab Unit	IL2	Yes	3/07/12	67% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	partial upgrade completed	EQ prone at this level. Problem is restricted to one room & SRU are undertaking some seismic improvement work. Once complete will be 67% IL2. (52% IL3). Widespread but minor cracking. Some relevelling. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	6 Hillmorton	Recreation Centre	Other	Kennedy, Archive, Cotter Collection	IL2	Yes	3/07/12	50% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	Yes	Apr-18	Apr-19		Widespread but minor cracking to foundation walls, brick façade, masonry walls, wall & ceiling linings. Some relevelling
Canterbury	6 Hillmorton	Te Awakura	Clinical	Stewart, AIS, Acute Inpatients	IL3	Yes	3/07/12	70% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Similar to Forensic Unit above. Some relevelling
Canterbury	6 Hillmorton	Te Waimokihi	Clinical	Mahu	IL3	Yes	3/07/12	80% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	partial upgrade completed	EQ prone at this level. Problem is restricted to one room undertaking some seismic improvement work. Once complete will be 67% IL2. (52% IL3) Widespread but minor cracking. Some relevelling. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	6 Hillmorton	Te Whare Mauri Ora	Clinical	Seaforth	IL3	Yes	3/07/12	67%IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	partial upgrade completed	EQ prone at this level. Problem is restricted to one room undertaking some seismic improvement work. Once complete will be 67% IL2. (52% IL3) Widespread but minor cracking. Some relevelling. Repairs to minor aspects of the building were undertaken to increase IL%.
	7 Hillmorton	Food Services	Other	Kitchen and food supply	IL2	Yes	23/06/12	33% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Food prep and services	As per above	Yes	Apr-18	Apr-19	Upgrade planned	Upgrade options being reviewed in line with new prioritisation framework, with business case to follow
	6 Hillmorton	Laundry Building		Canterbury laundry Services	IL2/3	Yes	8/03/13	35% IL2 or 27% IL3	Formal Structural Assessment/ Detailed Assessment	yes	No		Yes	Laundry operations continue	As per Above	Yes	Apr-18	Apr-19	Relocate service, repurpose or demo building	Replacement laundry currently in development. Feasibility study for re-purposing of building currently underway
Canterbury	6 Hillmorton	Training Unit & Library	Other		IL2	Yes	3/07/12	50% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	Yes	Apr-18	Apr-19		Widespread but minor structural damage, including cracking of pre-cast panels
Canterbury	6 Hillmorton	Tapuna Villa	Clinical	MH services	IL2	Yes	3/07/12	80% IL2 or 62% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19	partial upgrade completed	Widespread but minor cracking, as Forensic unit above. Some relevelling
Canterbury	6 Hillmorton	Youth Spec Services	Clinical	Adolescent Unit	IL2	Yes	3/07/12	100% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		Cracking to block veneer, strip foundation, internal wall & ceiling linings. Some relevelling
Canterbury	6 Hillmorton	Lincoln Green	Other	Building A (old cell block)	IL2	Yes	3/07/12	10% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A		EQ prone. Unreinforced Masonry (URM). Widespread damage & partial collapse of gable. No longer occupied.
Canterbury	6 Hillmorton	Lincoln Green	Other	Building B (old woodworking shop)	IL2	Yes	3/07/12	10% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A		EQ Prone. URM building (unoccupied). Cracking in masonry, slab, internal partitions. No longer occupied.
Canterbury	6 Hillmorton	Lincoln Green	Other	Building C (old store)	IL2	Yes	3/07/12	<33% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A		EQ Prone. Inadequate bracing system. Cracking in walls & ceilings. No longer occupied.
Canterbury	6 Hillmorton	Lincoln Green	Administration	Building D (office)	IL2	Yes	3/07/12	<33% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Administration services only	As per above	N/A	N/A	N/A		EQ Prone. Lack of adequate bracing walls. Cracking in walls & ceilings. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	6 Hillmorton	Lincoln Green	Administration	Building E (office)	IL2	Yes	3/07/12	<33% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Administration services only	As per above	N/A	N/A	N/A		EQ Prone. Lack of adequate bracing walls. Cracking in walls & ceilings. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	6 Hillmorton	Lincoln Green	Administration	Building F (office)	IL2	Yes	3/07/12	<33% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		No	Administration services only	As per above	N/A	N/A	N/A		EQ Prone. Lack of adequate bracing walls. Cracking in walls & ceilings. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	6 Hillmorton	Lincoln Green	Other	Building G (old Mortuary)	IL2	Yes	3/07/12	10% IL2	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A		EQ prone. (URM). Widespread cracking in walls & floor. No longer occupied.
Canterbury	6 Hillmorton	Lincoln Green	Clinical and Administration	Dietetics building A	IL2	Yes	3/07/12	Temp works complete to 33%	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	Yes	Apr-18	Apr-19		EQ prone. Widespread damage to walls & ceiling. Floor out of level.
Canterbury	6 Hillmorton	Lincoln Green	Clinical and Administration	Dietetics building B	IL2	Yes	3/07/12	Temp works complete to 33%	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	Yes	Apr-18	Apr-19		EQ prone. Widespread damage to walls & ceiling. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	6 Hillmorton	Lincoln Green	Clinical and Administration	Dietetics building C	IL2	Yes	3/07/12	Temp works complete to 33%	Formal Structural Assessment/ Detailed Assessment	-	No		No	Clinical services provided	As per above	Yes	Apr-18	Apr-19		EQ prone. Widespread damage to walls & ceiling. Repairs to minor aspects of the building will be undertaken to increase IL%.
Canterbury	7 Ashburton	Elizabeth Offices	Clinical and Administration	Mental Health, Tutorial Hall , Administration Office	IL2	Yes	27/06/12	90% IL2	Formal Structural Assessment/ Detailed Assessment		No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		widespread minor cracking.
Canterbury	7 Ashburton	Maternity	Clinical	Oak Grove Consultants, Maternity	IL3	Yes	27/06/12	45% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		Minor cracking in service ducts. Minor cracking to walls / ceilings
Canterbury	7 Ashburton	Wards 1 & 3	Clinical	Wards	IL3	Yes	12/12/16	62% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A	seismic upgrade complete	
Canterbury	7 Ashburton	Ambulance Station	Clinical		IL2	Yes	27/06/12	35% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		
Canterbury	7 Ashburton	Chapel	Other		IL2	Yes	27/06/12	46% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	N/A	N/A	N/A		
Canterbury	7 Ashburton	Wards 2 & 6	Clinical	Wards	IL3	Yes	27/06/12	35% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A	seismic upgrade planned	widespread but minor cracking.
Canterbury	7 Ashburton	Radiology	Clinical	X-Ray	IL3	Yes	27/06/12	100% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		Minor cracking
Canterbury	7 Ashburton	Theatres	Clinical	demolished	IL3	Yes	27/06/12	15% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A	Demolished	New theatre now complete and operational 100% of IL3
Canterbury	7 Ashburton	Pathology	Clinical	Laboratory	IL3	Yes	27/06/12	100% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		Minor cracking
Canterbury	7 Ashburton	Kitchen	Clinical	Food Services, Cafeteria	IL3	Yes	27/06/12	100% IL2 or 77% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		floor cracking. Some settlement. Minor wall & ceiling cracking
Canterbury	7 Ashburton	Laundry	Other	Laundry Services	IL2	Yes	27/06/12	100% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		Laundry function closed. Refurb after previous fire not undertaken.
Canterbury	7 Ashburton	Boilerhouse	Clinical	Boiler and Plant Room	IL4	Yes	27/06/12	62% IL4	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		
Canterbury	7 Ashburton	Services	Other	Maintenance, Trade Services	IL2	Yes	27/06/12	80% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Maintenance services only	As per above	N/A	N/A	N/A		Minor cracking.

Building Details						Current Assessment of Seismic Status							Occupation Status			Future Plans				Other
DHB	City/Campus	Building name	Services in Building	Services in Building	Seismic Importance Level	Has the Building Been Assessed (Yes/No)	If Assessed, Date of Last Assessment NB: All assessments listed are post EQ and ongoing.	Assessed NBS %	Assessment Type If other, use comment field to specify	Critical Structural Weakness Identified? (yes/no) If yes, use Comment field to specify	Drop Zone Issues Identified? (yes/no) If yes, use Comment field to specify	DHB comment	Is Building Occupied? (Yes/No)	If Occupied, Details of Occupation	If Occupied, DHB to detail the Basis of Continued Occupation (include reference to Board decisions, engineering and legal advice as appropriate)	Is a First or Subsequent Assessment Planned?	Date of repeat damage assessment	Date of Next Assessment (DD/MM/YY)	DHB to outline whether future work is planned (including Details of Interim or Permanent Remediation and/or Indicative Costs if known)	DHB's general comments or issues
Canterbury	7 Ashburton	Nurses Hostel	Other	Corporate, Meeting Rooms, Leased Offices	IL2	Yes	27/06/12	35% IL3 or 46% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Administration services only	As per above	N/A	N/A	N/A		Damage to external cladding panels
Canterbury	7 Ashburton	Turangi Home	Clinical	Elderly & Dementia	IL3	Yes	27/06/12	45% IL3 old part or 100% IL3 new wings	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		minor cracking
Canterbury	7 Ashburton	Bulk Store	Other		IL2	Yes	27/06/12	11% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	N/A	N/A	N/A		Demolished
Canterbury	7 Ashburton	Medical Staff Quarters	Other	House Surgeon Accommodation	IL2	Yes	27/06/12	29% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Residential	As per above	N/A	N/A	N/A		Would be considered EQ prone, but as a residence, shouldn't be assessed the same way
Canterbury	7 Ashburton	Mortuary	Other		IL2	Yes	27/06/12	100% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes		As per above	N/A	N/A	N/A		
Canterbury	7 Ashburton	Dental Clinic	Clinical	Community Dental	IL2			90% IL2		-	No		Yes	Clinical services provided	As per above	N/A	N/A	N/A		
Canterbury	7 Ashburton	Ashburton Hospital - Car Park	Other					n/a		-	No		Yes		As per above	N/A	N/A	N/A		
Canterbury	8 Akaroa	Akaroa Hospital	Clinical	vacated	IL3	Yes	13/04/12	15% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		No			N/A	N/A	N/A	Demolished	Demolished
Canterbury	8 Lincoln	Lincoln Hospital	Clinical	Womens Health	IL2	Yes	1/03/12	40% IL2 or 31% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		EQ prone at IL3. damage to wall & ceiling linings. Chimney repaired
-	8 Ellesmere	Ellesmere Hospital	Clinical	Support, Continuing care of elderly	IL2	Yes	1/03/12	40% IL2 or 31% IL3	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		EQ prone at IL3. Cracking to ceiling & wall linings. Chimney repaired
-	8 Darfield	Darfield Hospital	Clinical	Medical, Surgical Rehabilitation, Carer	IL2	Yes	3/10/13	Bldg 40 % but foundations 20% IL 2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		EQ prone. Cracking to ceiling & wall linings. Chimney repaired
-	8 Rangiora	Rangiora Hospital	Clinical	Womens Health & Maternity	IL3	Yes	8/02/12	25% IL3	Formal Structural Assessment/ Detailed Assessment	Yes	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A	Redevelopment Stage 1 complete	EQ Prone. Widespread minor to moderate structural cracking.
-	8 Waikari	Waikari Hospital	Clinical	Continuing Care of the Elderly, Rehabilitation, Carer Support, Respite	IL2	Yes	30/05/12	Bldg 77 % but Grnd floor foundations 20% IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Apr-18	Apr-19		EQ Prone. Settlement. Cracking of wall & ceiling linings. Cracking of foundation walls.
Canterbury	8 Oxford	Oxford Hospital	Clinical	Leased to Oxford Community Medical Centre	IL2	Yes	14/08/12	50%IL2	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		EQ prone. Differential settlement. Cracking to ceiling & wall linings.
Canterbury	9 Akaroa Dental	Akaroa Community Dental	Clinical	Community Dental	IL2	Yes	3/10/13	38%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - single storey timber framed structure, relocated and upgraded in 2009
Canterbury	9 Rangiora Oral Health	Rangiora Community Dental	Clinical	Community Dental	IL2	Yes	16/04/15	Building >80% Foundations 57%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Kaiapoi Dental	Kaiapoi Community Dental	Clinical	Community Dental	IL2	Yes	27/03/15	Building >80%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Hornby Dental	Hornby Community Dental	Clinical	Community Dental	IL2	Yes	16/04/15	Building >80%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Aranui Dental	Aranui Community Dental	Clinical	Community Dental	IL2	Yes	17/07/13	Building >80%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Burnside Dental	Burnside Community Dental	Clinical	Community Dental	IL2	Yes	22/07/13	72%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Northcote Dental	Northcote Community Dental	Clinical	Community Dental	IL2	Yes	17/12/14	Building >80% Foundations 69%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Lincoln Dental	Lincoln Community Dental	Clinical	Community Dental	IL2	Yes	19/07/13	80%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old
Canterbury	9 Woolston Dental	Woolston Community Dental	Clinical	Community Dental	IL2	Yes	17/12/14	Building >80% Foundations 57%	Formal Structural Assessment/ Detailed Assessment	-	No		Yes	Clinical services provided	As per above	Yes	Feb-17	N/A		Community Dental Clinic - less than 4 years old

ILLevel	Services in Building	Current Assessment Type	Yes no	Details of Occupation	DHB
-	-	-	-	-	-
IL1	Clinical	Desktop	Yes	Clinical services provided	Auckland
IL2	Administration	Initial Evaluation Process (IEP)	No	Administration services only	Bay of Plenty
IL3	Clinical and Administration	Formal Structural Assessment/ Detailed As		Residential	Canterbury
IL4	Other			Maintenance services only	Capital and Coast
Unknown or Not Applicable					Counties Manukau
					Hawkes Bay
					Hutt Valley
					Lakes
					MidCentral
					Nelson Marlborough
					Northland
					South Canterbury
					Southern
					Tairawhiti
					Taranaki
					Waikato
					Wairarapa
					Waitemata
					West Coast
					Whanganui